



3M Science.
Applied to Life.™

3M Personal Safety Division

European Product Catalogue.

Science has the power to change the world, solve the toughest problems and shape the future. But science is just science, until you apply it to something.

Make it do something, change something. No one knows this better than 3M.

The average person uses 3M science many times a day and doesn't even know it.

But it is everywhere, supporting 46 separate technology platforms and continuously driving our innovations.

No other company uses science like we do.

That's 3M Science. Applied to life.™

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Who we are

Our vision

3M Technology Advancing Every Company

3M Products Enhancing Every Home

3M Innovation Improving Every Life



Our strengths

It starts with technology. And it is not just that we have technology; it's how we share, combine, and leverage technology across the company to produce unique products to solve the challenges our customers face.



Our manufacturing footprint and capability in many key areas allows us to produce higher performing products at lower costs, so we can help our customers keep their costs down.



Finally, the 3M brand and other strategic brands form the basis of the promise we offer our customers in terms of quality and performance of 3M products.



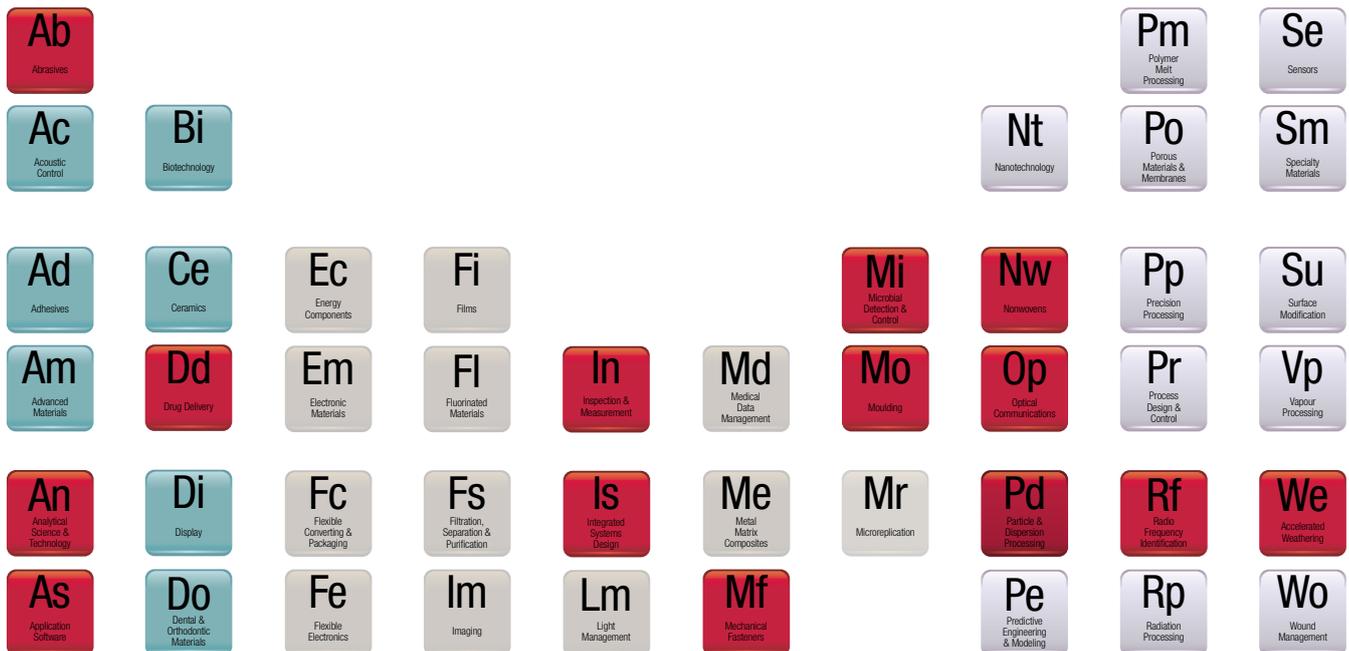
Our global presence isn't just about selling; we develop, adapt and manufacture products around the world as well. So we can meet customer needs on a local, regional, and global basis.

Our history of innovation through science

We often get asked how we innovate. It starts with listening to you, our customer. We discover the challenges you face and find solutions to suit you. Included in our 'Insights 2 Innovation' program, members of our team visit end user locations where they can help to identify hazards. From there our scientists can work on coming up with solutions.

At 3M we endorse a 15% rule, encouraging employees to spend 15 % of their work time to discovering and following their own ideas, a concept which has led to some of our most notable inventions and innovations. This means that we have the freedom to take risks and learn from our mistakes, something our 8500 scientists would tell you is essential to scientific discovery.

In the personal Safety Division, we serve a variety of market sectors, so our products are designed to suit the specialised needs of these environments. Key industries for us include construction, metal working, pharmaceuticals, healthcare, chemicals, military and oil and gas. Some of these industries have their own division within our 3M business, giving us increased industry knowledge. We also have greater flexibility in research and development through our 46 core technologies, available across our entire business. This means our scientific advancements can be shared from one tiny creation, such as the foam used to create 3M™ E-A-R™ Classic Earplugs, to larger applications, such as noise insulation in the exterior of aeroplanes.



Using our technologies 3M has continued to grow and develop, continuously innovating and in May 2014 we reached our 100,000th patent.

Sustainability

To 3M, sustainability is extremely important. We have consistently worked to improve our impact on the world we live in through protecting the planet, giving back to society and investing in education.

We at 3M are committed to improving our planet, our society and individual lives. We pride ourselves on the fact that we have been committed to this for many years. In 1975 3M pioneered the concept of pollution prevention with the creation of the Pollution Prevention Pays (3P) programme.

Over the last 40 years 3M's 3P programme has prevented nearly 4 billion pounds worth of pollution as well as reducing volatile air emissions by 25% since 2010.

We want to make a difference.



Giving back

When it comes to sustainability, we'd consider our society to be just as important as the environment. We have, over time, invested over \$1.4 billion in creating sustainable communities. Under our 3M4Good scheme, our employees are entitled and encouraged to spend one day a year on volunteer work, some of our colleagues have gone out into communities to help with projects such as gardening and the construction of buildings, both in Europe and further afield. In addition to this our legal teams are recognised for their pro-bono work, with seniors, immigrants and children. This is in addition to our regular fundraising activities for local and larger charities, including a yearly 10km fun run by our UK Aycliffe lab.



Investing in young minds

Not only do we think that society is an important part of sustainability, but for continued development, we also believe in investing in the education of young people. This is why we have done a lot of work in STEM education, reinforcing the wonders of science with our visiting wizards who go into schools and perform experiments. We also have formed a partnership with Discovery Education in order to set up the Young Scientist Challenge.



World skills

3M are an official Global Industry Sponsor of World Skills. They provide training and work to increase skills amongst young people worldwide which will help them grow and in turn enable them to form a strong and skilled work force. This organisation is very important to us. Educating both young and old, teaching them new skills is and will continue to be an essential process. Because as the world we live in changes, we will have to change with it.



Training and education

Training tailored to you

At 3M we believe that education is key to protection. It is essential that workers and safety managers understand the risks to their health in the workplace and know how to protect against these risks in the best way. In order for them to do this, we provide a vast array of training, suited to different businesses and individual needs.



On-site and on topic

We can provide on-site training, with a visit from our Safety Caravan, mobile across the EU or with the SafeTea Break concept recently introduced in the UK, which aims to give safety managers the chance to teach workers about health and safety issues and the importance of wearing PPE. We also provide extensive training to distributors, so that they can then advise and assist customers in selecting the correct protective equipment for their workplace. Of course our technical service teams are also on hand to present their expert knowledge of the Health and Safety Industry.



Accessible to all

We work hard to make sure that our training and tools are accessible to all, which is why we have developed an extensive eAcademy. We currently have modules spanning how the different parts of the body work, different hazards in the workplace, and how it is possible to protect against them. We are determined to increase the safety culture and having online training means we can reach more people. It is also flexible to the learning pace of the user, and very user friendly as well as being convenient and relevant to the needs of each individual.





The 3M eAcademy

The flexible way to Discover & Learn throughout your busy day

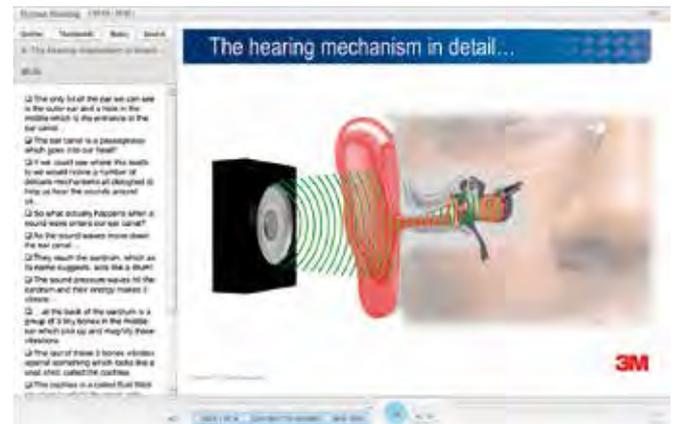
Join us online any time of the day to expand your knowledge on our current range of personal protective equipment for the workplace. Learn what you want, when you want, where you want... and at a pace that's right for you.

3M offers you engaging interactive training on topics relevant to you

- Workplace hazards and health effects
- Industry standards and regulations
- The approach to protection
- 3M Personal Safety Solutions

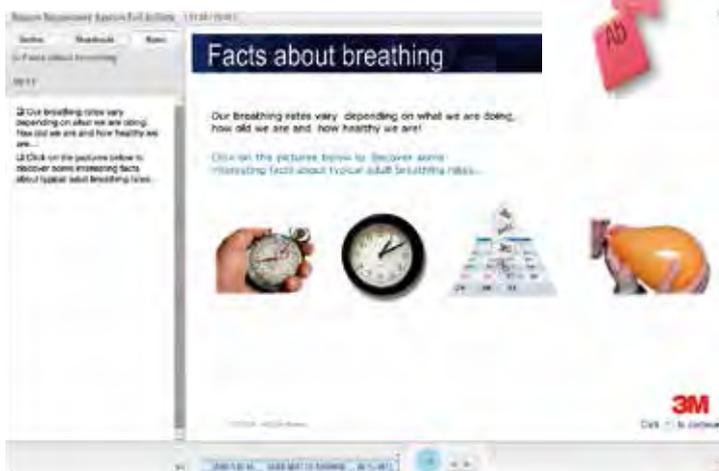
Why e-learning?

Conventional training can often be difficult to manage. It can also be expensive, not simply in monetary terms, but in the time that people are kept away from their job. Time may be limited to cover content, whilst finding a convenient time for both trainer and staff may also be difficult.



3M.eu/eAcademy

- User-friendly site with online help
- Convenient – learn whenever and wherever you want
- Flexible – learn at a pace that's comfortable
- Personalised completion certificates
- Team progress tracking for managers



Services

We believe that with a quality product, it is important that the customer also receives quality services. Not only do we provide different varieties of training and education, but we also have many other tools available to our customers.

Importance of Fit

In order to be fully protected, it is essential that PPE fits correctly. We provide fit testing for respirators (and fit testing guidelines online) as well as E-A-Rfit Validation testing for earplugs and earmuffs. We know that everyone is different and in order to get the best protection it is crucial that they know how to correctly fit and wear their personal protective equipment.

3M Respiratory Protection offers a wide range of disposable and reusable respirators, as well as Powered and Supplied Air Respiratory Systems. However, even high quality products need a secure fit in order to protect the wearer. One model of respirator may not fit everyone. When choosing a respirator users should be fit tested in accordance with national requirements. For information on fit testing procedures, contact your safety officer or 3M. Even after a user has had a fit test, a fit check should be carried out before each use. A Respiratory Fit Check guide is available on **page 21** of this catalogue.



3M™ E-A-Rfit™ Dual-Ear Validation System measures the effectiveness of the earplug from inside the ear, providing accurate quantitative results. It is a complete solution that can simultaneously test both ears with either earplugs or earmuffs and has a user-friendly interface. To find out more, take a look at **pages 90-91**.



Unlike respiratory protection, where fit testing is present in regulations, there are no regulatory requirements regarding the fitting of eyewear. However 3M Eyewear Protection understands the importance of individual fit and has developed an easy to use tool for fit testing. The 3M™ Eyewear Fit System uses two tools and a simple 6 step method to assess the four key elements of protective eyewear fit: view, coverage, gaps and security. For more information see **page 115** of this catalogue.



3M Online

A selection of downloadable and printable documents are available online, such as selection tools, fit test guides, and guidance on the importance of protection. From our website you will be able to access product information, with market area specifications, to help select the right personal protective equipment for the right environment. You will also be able to discover webinars by experts concerning health and safety in the workplace as well as our own eAcademy.

Everything in one place, on your computer, laptop, tablet or mobile.



3M PPE Safety Solutions

Subscribe to our channel on YouTube to watch customer testimonials, technical support or product information videos.

Visit www.youtube.com/user/3MPPEsafetySolutions

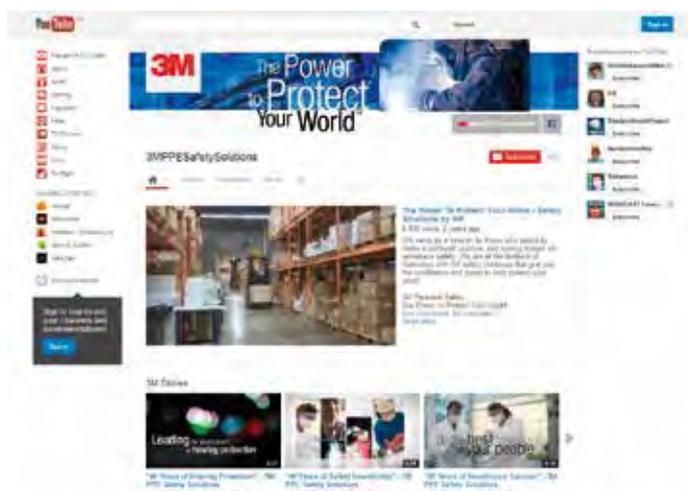
You can also:

Find us on Facebook



or

Follow us on Twitter



Productivity

We don't only aim to improve the safety of our customers, we also want to help them keep costs down. Our products are designed to last and to provide more efficient protection, but they can bring efficiencies in other ways.

PELTOR™

As many supervisors know, efficient on-site communication can save a lot of time throughout the duration of a project. Recently, a study by Lund University Faculty of Engineering in Sweden showed that downtime and interruptions were reduced by 19% when two-way radio communication headsets were used. A single construction worker gained 380 minutes of productive time per week.

The study was conducted by Victoria Joang and Aidin Sakikovic, two researchers from Lund's graduate program in civil engineering. They compared two work weeks on one of Skanska's major water main projects in Sweden, analysing similar work activities during each week. In the first week, the workers did not use two-way radios. In the second week, they were equipped with 3M™ PELTOR™ WS™ LiteCom Headsets, which have a built-in two-way radio and a Bluetooth® wireless technology mobile phone connection.

Detailed follow-up interviews showed that the big advantage was being able to quickly relay and receive messages on the job, especially on large construction sites where eye contact is not possible. Improved team spirit was another reported benefit.

Speedglas™

Another example of efficiency can be seen in our Welding portfolio, where, by using a 3M™ Speedglas™ Welding Helmet with auto-darkening filters, companies can save up to 1€ per hour.

We have created a Return on Investment calculator for the welding portfolio, where you can input all your numbers to see how much your company would save by using these auto-darkening filters. From this we have calculated that a company with low salary costs who have previously not used an auto-darkening filter, would be able to save 75 euro cents per hour per worker by using almost any auto-darkening filter. So if they had 100 workers, all wearing an auto-darkening filter, 5 days a week, for 8 hours they would make a weekly company saving of 3000 euros.





Respiratory protection

Types of Protection Equipment from 3M

3M offers you a wide range of disposable, reusable, powered and supplied air respirators for protection against gases, vapours and particulates allowing you to choose the level and type of protection, comfort, style and maintenance requirements you need to work safely, comfortably and effectively.

There are three main types of RPE available from 3M:

Disposable Respirators

- Ideal for most industries and applications where wearers require particulate protection e.g. dusts and mists
- A choice of cup-shape or flat-fold, valved or unvalved and also the option to protect against ozone and nuisance levels of organic vapours and acid gases
- Available in two types to satisfy single shift use (NR) and reusable (R) requirements
- Lightweight and maintenance free
- Comfortable, convenient and easy to use



Reusable Half and Full Face Respirators

- Offer protection against particulates, gases and vapours and combinations of the two
- These respirators have integrated or replaceable filters and parts. They may be cleaned, stored and reused provided they are in good condition
- Full face respirators also offer integrated eye and face protection
- Many models are fully maintainable



Powered Air & Supplied Air Systems

- Offer protection against dusts, mists, fumes, gases, vapours and combination hazards e.g. paint spray
- Can offer integrated eye, face, head, neck and hearing protection in one system avoiding incompatibility issues between items of PPE
- Modular system allows you to mix and match parts as your environment or application changes giving you the ultimate in flexibility and ease of use
- No increase in breathing resistance means more comfortable and longer wear time
- Usable by a wide range of users regardless of facial characteristics; shape, size etc.



The 4-Step Method

Selecting and specifying the appropriate respiratory protective equipment may appear daunting with so many factors to consider and so many options to choose from. With our simple 4-step method it's easy to choose the correct level of protection and comfort required to optimise respiratory protection:

1. Identify the hazards

Respiratory: dust, metal fume, gas, vapour etc.
Other neck-up: head, eye, face, hearing etc.



2. Assess the risk

Assess the hazard levels against safety standards and consider other protection e.g. skin, eye, face, head and body



3M™ EVM Monitors measure hazards in real-time



3M™ Organic Vapour Monitor Badges measure personal exposure to hazards



3. Select the right respirator

Disposable, reusable, half mask, full face, powered air, supplied air and the right filter if appropriate



4. Train in fitting and use

Make sure you know how to use and maintain your RPE to ensure effective respiratory protection. 3M sales and technical professionals can help you to define your training needs and can provide training and on-site consultations on all aspects of respiratory protection tailored to your individual needs. You'll also find easy to use training on our website:

www.3M.eu/PPESafety





3M™ EVM Environmental Monitors

Simultaneous Particulate & Gas Concentration Measurement in Real-time

The 3M™ EVM Series monitors both particulates and air quality in one compact instrument. From healthcare and manufacturing to construction and military applications, the EVM Series provides a lower cost of ownership by combining three instruments into one. Its userfriendly interface, patented dial-in rotary impactor, and advanced reporting and analysis features make it a particulate and IAQ (Indoor Air Quality) area monitoring instrument of choice for industrial hygienists and safety professionals worldwide.

Simultaneous measurement

- Measures particulate mass concentrations (0.1-10 µm), select toxic gases, select volatile organic compounds*, carbon dioxide, relative humidity, temperature, air velocity (with purchase of optional accessory).
- Helps control equipment costs, by combining three instruments into one.



Simultaneous measurement

- Proprietary “dial-in” technology enables fast, easy selection of 4 different particulate size settings.
- Eliminates the need to switch out cyclones for different measurement parameters.

90° light-scattering laser photometer

- Enables real-time measurement of particulates.

Built-in sampling pump

- Allows user to easily capture particulate samples for on/off-site analysis.
- Identify and confirm particulate concentration in question.

* Visit www.3M.eu/detection for details regarding volatile organic compounds and toxic gas sensor selection.

Choose the Model That Best Meets Your Needs

	EVM-7 Indoor Air Quality/ Particulate Monitor	EVM-4 Indoor Air Quality Monitor	EVM-3 Particulate Monitor
Temperature	•	•	•
Relative Humidity	•	•	•
Air velocity (with purchase of optional accessory)	•	•	•
Particulates (mass concentration)	•		•
Toxic Gas (choose from nine sensors)	•	•	
Carbon Dioxide	•	•	
Select volatile organic compounds	•		

The Economical, Accurate Way to Monitor Your Workplace

3M™ Air Monitors are simple and effective devices that collect certain airborne contaminants using the scientific principle of diffusion. They meet or exceed ±25% accuracy at a 95% confidence level for many workplace contaminants.

- Simple and convenient. There are no batteries, hoses, pumps, or equipment to calibrate.
- Easy to use. Just clip the monitor to shirt lapel, collar, or pocket.
- Versatile. 3M monitors can also be used for area monitoring, if sufficient air flow exists.
- Analysis options. 3M monitors can be analyzed in the lab of your choice or returned for analysis.
- Comfort. 3M monitors are small and lightweight and will not interfere with employee activities.





Disposable Particulate Respirators

Comfortably breathing clean, safe air is important for workers' health and workplace morale. With this in mind we have designed a range of 3M™ Disposable Respirators using science to increase comfort, breathability and protection.

In combination with ergonomic design, a wide range of technologies including the 3M™ CoolFlow™ Valve help to deliver comfortable protection with easier breathing and reduced heat build-up.

The 4-Step Method

1. Identify the Hazards

Application*		Performance level	Important information
Sanding,	Rust, Metal Particles, Filler	FFP1	
	Concrete, Stone	FFP1 FFP2	FFP3 When Silica is present
Cutting,	Cement, Wood, Steel	FFP2	
	Drilling	Paints/Varnish/Anti-rust coating	FFP2 FFP3 When Chromates are present
Low temp. oil spray	Steel, Stainless Steel	FFP3	
	Anti-Fouling Varnish	FFP3	Speciality respirator may be required
Welding	Mild Steel, Zinc (Autogen, MIG/MIK)	FFP2	3M™ 9928 or 3M™ 9925 for Ozone protection
	Stainless Steel (Electrodes)	FFP2	9928 or 9925 for Ozone protection
	Soldering	FFP2	
Work with Asbestos	Small amounts infrequent exposure	FFP3	
Work with Glass and Mineral fibres		FFP2	
Waste Sorting		FFP2	Speciality Respirator may be preferred May need gas and vapour respirator
Spraying	Paint spray	FFP2	May need gas & vapour respirator
	Pesticides (water based)	FFP2	
Utility maintenance (e.g. filter change)		FFP3	
Allergies	Pollen, Animal dander	FFP1	
	Grain dust	FFP2	
Contact with:	Mold/Fungus	FFP2	FFP3 With Tuberculosis
	Bacteria	FFP2	
	Diesel exhaust/Smoke	FFP2	

* Warning: This guide is only an outline. It should not be used as the only means for selecting a respirator. Details regarding performance and limitations are set out on the respirator package and user instructions. Before using any of these respirators, the wearer must read and understand the user instructions for each product. Specific country legislation must be observed. Please note that the applications shown highlight some of the hazards which may be considered. Selection of the most appropriate respiratory protective equipment (RPE) will depend on the particular situation and should be made only by a competent person knowledgeable of the actual working conditions and the limitations of RPE.

2. Assess the Risk

	EN 149:2001+A1:2009 FFP1 Respirators	EN 149:2001+A1:2009 FFP2 Respirators	EN 149:2001+A1:2009 FFP3 Respirators	EN 149:2001+A1:2009 Welding Respirators
Nominal Protection Factor (NPF)	NPF 4	NPF 12	NPF 50	NPF 10
Typical Applications	Low levels of fine dust particles (up to 4 x Threshold Limit Value (TLV)) and oil or water based mist typically found during hand sanding, drilling and cutting	Moderate levels of fine dust particles (up to 12 x TLV) and oil or water based mist typically found during plastering, cement, sanding and wood dust	Higher levels of fine dust particles (up to 50 x TLV) and oil or water based mist typically found when handling hazardous powders found in the pharmaceutical industry or work with biological agents and fibres	Moderate levels of fine dust particles (up to 10 x TLV), oil and water based mist, metal fume and ozone (10 x TLV) and organic vapours below TLV typically found in welding and soldering

Nominal Protection Factor (NPF): The theoretical protection level of a respirator based on laboratory measured performance data.



3. Select the Right Respirator

Once you have selected the protection factor you require, you can then consider whether you need a cup-shaped respirator, or a foldable respirator, whether it has buckled straps and whether it is valved or not.



3M™ Cup-Shaped Respirators

- Convex shape, nose clip and twin strap design
- Easy to fit
- Durable, collapse resistant shell



3M™ Buckle Strap Respirators

- Robust and durable design provides multishift capability and secure feel
- Adjustable braided headbands
- Soft inner face-seal improves comfort



3M™ Foldable Respirators

- Ultra soft, flexible and comfortable fit resulting from the multiple panel design
- Comfort Series - Flat Fold only: Individually packed, foldable design prevents contamination before use and allows easy storage



3M™ Cool Flow™ Valve

- Effective removal of heat build-up provides a cooler and more comfortable wear
- Provides longer continuous wear time
- Reduces risk of fogging of spectacles and eyewear

4. Train in Fitting and Use

Training Offered by 3M

Correct use and appropriate maintenance of personal protective equipment (PPE) from 3M makes a major contribution towards ensuring that it provides effective protection. Our experienced sales and technical teams will help you make the most of your products. In compact

training units, they will show you and your employees how to recognize potential hazards, suggest what measures to take and help explain how to choose the appropriate protective equipment for each particular situation

EN 149:2001+A1:2009 Standard

3M™ Disposable Respirators meet the requirements of European Standard EN 149:2001 + A1:2009, filtering facepiece respirators for use against solid and non-volatile liquid particles only. Products are classified by filtering efficiency and maximum total inward leakage performance (FFP1, FFP2 and FFP3), also by usability and clogging resistance.

Performance tests in this standard include:

- filter penetration and extended exposure (loading) test - evaluates the filtration performance when new and over time
- breathing resistance - evaluates the ease of breathing (inhalation and exhalation) through the respirator
- total inward leakage - evaluates the filter penetration, valve leakage (if fitted) and importantly the face seal leakage of the respirator when worn by a panel of different people whilst conducting simulated work exercises
- clogging resistance - evaluates the ability of the respirator to continue to function effectively and provide respiratory protection in very high dust environments

Reusable products are also subjected to a cleaning cycle (specified by the manufacturer) and 24 hour storage to confirm the product performance is not affected by re-use. Clogging resistance testing is a mandatory requirement for reusable products, but is optional for single shift use only (non reusable) products. A full copy of EN 149:2001+A1:2009 can be purchased from your national standards body.

Marking designations:

R = Reusable

NR = Non reusable (single shift use only)

D = Meets the clogging resistance requirements



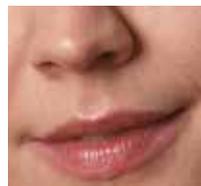
The importance of comfort

To make sure that the respirator protects you, it must be worn during all periods of exposure. Make sure that you choose a respirator that you can wear comfortably for your entire shift.



Face and head comfort

The respirator's edge should be flexible and the shape and size should cover the nose, mouth and chin without causing excessive pressure. A headband material which provides a good, even tension across the head can ensure a comfortable, secure fit for a range of head sizes.



Skin comfort

Skin comfort will be affected by the smoothness and softness of the inner material in contact with the skin - especially over a long period of time. A soft inner face seal and sweat absorbent nose foam will provide greater comfort. Rough or hard materials, coupled with a high temperature inside the respirator may be itchy and unpleasant.



Coolness

An efficient exhalation valve minimises heat build up, particularly in hot and humid work conditions.



Lightweight

Take advantage of technological innovation and choose a lightweight respirator for optimal comfort.



Breathing ease

An efficient exhalation valve and high-efficiency, low breathing resistance filter material will help you to breathe comfortably.



Compatibility with other PPE

Make sure that the respirator you select fits well with the other PPE required for your work such as eyewear and hearing protection to ensure maximum comfort.



The importance of fit

Disposable respirators are most effective when there is a good seal between the edges of the respirator and your face. The instant this seal is broken, protection is compromised as contaminated air can leak in through any gaps.

Here's what to look for:

- Upper strap should be positioned on the crown of the head. Strap should not be twisted
- Noseclip should be moulded around nose and cheeks to give a good seal
- Respirator should be correctly positioned on your face and head
- For flat fold respirators make sure the panels are fully unfolded
- Lower strap should be positioned below the ears. Strap should not be twisted



The face should be clean shaven as beards or other facial hair can prevent a good seal.



Long hair should be tied back.



Using both hands, mould noseclip to the shape of the lower part of the nose to ensure a close fit and good seal. Do not pinch the noseclip with only one hand as this may not give a good fit.



Fit Check

- A pre-use fit check must be conducted every time you fit your respirator
- Cover the front of the respirator with both hands, being careful not to disturb the fit of the respirator
- Unvalved respirator – exhale sharply, Valved respirator – inhale sharply
 - If air leaks around the nose, re-adjust the noseclip to eliminate leakage
 - If air leaks at the respirator edges, work the straps back along the sides of the head or adjust the tension to eliminate leakage

Repeat the above fit check.

If you cannot achieve a proper fit do not enter the hazardous area - see your supervisor.



One model of respirator may not fit everyone. Users should be fit tested in accordance with national requirements. For information on fit testing procedures, contact your safety officer or 3M.



Comfort Series: 3M™ Aura™ Flat Fold 9300+ Series

The 3M™ Aura™ Disposable Respirators 9300+ are the result of 3M's continuous drive to improve comfort. They are packed with ground-breaking ideas, technologies and materials and have also retained many of the features that helped make the original 9300 series hugely popular.

Features include low breathing resistance filter technology for easier breathing throughout your shift, an embossed top panel to reduce fogging of eyewear, a sculpted edge for improved compatibility with eyewear and a chin tab to improve ease of fitting.

Features and Benefits:

Foldable – Proprietary 3-Panel Design

- Ingenious 3-panel design fits a wide range of face shapes and sizes
- Accommodates your facial movements
- Collapse resistant: ideal for work in hot humid environments

Sculpted Nose Panel

- Curved, low profile design
- Conforms well to nose and eye contours
- Helps provide a good field of vision and improves compatibility with eyewear

Low Breathing Resistance Filter Technology

- Combines the benefits of 3M's electret particulate filter material with advanced low breathing resistance filter technology
- Improved breathing ease and comfort

Embossed Top Panel

- Helps reduce fogging of eyewear

3M™ Cool Flow™ Valve

- Effective removal of heat build up provides a cooler and more comfortable wear
- Removes exhaled air and minimises the risk of fogging eyewear
- Shrouded valve to remove risk of cross contamination in clinical environments (1883+ only)

Chin Tab

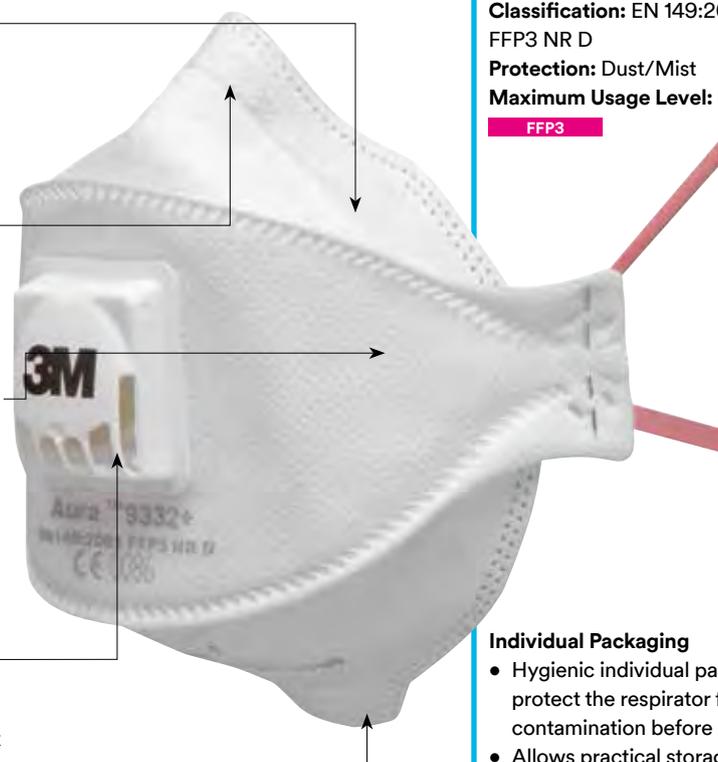
- Improves ease of donning and adjustment to help achieve a comfortable fit

Face and Head Comfort

- Large soft nose foam material and smooth inner cover web both feel incredibly soft on the skin and help to create a comfortable environment for the face

Compatible with

- Eyewear from 3M
- Hearing Protection from 3M



3M™ Low Breathing Resistance Filter Technology



Foldable Three-Panel Design



3M™ Cool Flow™ Valve

Typical Applications

- Construction
- Metal working
- Agriculture
- General manufacturing
- Automotive
- Woodworking
- Maintenance
- Chemical/ petrochemical
- Pharmaceuticals/ laboratory

3M™ Aura™ Particulate Respirator 9332+

Classification: EN 149:2001+A1:2009 FFP3 NR D

Protection: Dust/Mist

Maximum Usage Level: Up to 50 x TLV

FFP3

Individual Packaging

- Hygienic individual packaging helps protect the respirator from contamination before use
- Allows practical storage and dispensing in the workplace



3M™ Aura™ particulate respirators 9312+, 9320+, 9322+ and 9332+

also available in handy packs of 5



3M™ Respiratory Protection Equipment



3M™ Aura™ Particulate Respirator 9310+



3M™ Aura™ Particulate Respirator 9312+



FFP1
3M™ Aura™ Particulate Respirator 9310+
Classification: EN 149:2001+A1:2009
 FFP1 NR D
Protection: Dust/Mist
Maximum Usage Level: Up to 4 x TLV



FFP1
3M™ Aura™ Particulate Respirator 9312+
Classification: EN 149:2001+A1:2009
 FFP1 NR D
Protection: Dust/Mist
Maximum Usage Level: Up to 4 x TLV



FFP2
3M™ Aura™ Particulate Respirator 9320+
Classification: EN 149:2001+A1:2009
 FFP2 NR D
Protection: Dust/Mist
Maximum Usage Level: Up to 12 x TLV



FFP2
3M™ Aura™ Particulate Respirator 9322+
Classification: EN 149:2001+A1:2009
 FFP2 NR D
Protection: Dust/Mist
Maximum Usage Level: Up to 12 x TLV



FFP3
3M™ Aura™ Particulate Respirator 9330+
Classification: EN 149:2001+A1:2009
 FFP3 NR D
Protection: Dust/Mist
Maximum Usage Level: Up to 50 x TLV



FFP3
3M™ Aura™ Particulate Respirator 1883+ with Shrouded Valve
Classification: Meets the requirements of EN 149:2001+A1:2009 FFP3 NR D and EN14683:2005 Type IIR (Surgical Masks-Requirements and Test Methods)
Protection: Solid and Non-volatile Liquid Particles
Maximum Usage Level: Up to 50 x TLV





Comfort Series: 3M™ Cup Shaped 8300 Series

The 3M™ Respirators 8300 Series enable you to enjoy a comfortable ‘cushion-fit’, facing hard work from a soft place.

The 8300 Series respirators have been designed with comfort in mind. The super-soft, cushioned lining provides instant yet lasting comfort; whilst the robust design makes the 8300 Series tough and durable – all this helps to increase user wearability. 3M offers a comprehensive range of respiratory protection – you can choose from different protection levels and styles that best suit your needs.

Typical Applications

- Construction
- Quarrying
- Pottery/Ceramics
- Engineering
- Pharmaceuticals
- Sawmills
- Iron and steel foundries
- Shipbuilding
- Metalworking

Features and Benefits:

Braided Headbands

- Materials have been selected for extra comfort and durability
- Colour-coded headbands offer easy protection level identification

M-Noseclip

- The noseclip is quick and easy for wearers to mould around the nose offering greater comfort

Robust Outer Shell

- The shell construction offers users added durability

3M™ Cool Flow™ Valve

- The Cool Flow valve reduces heat build-up to offer workers comfortable protection – even in hot humid conditions

3M™ High Performance Filter Material

- Effective filtration helps wearers to breathe easily through the respirator for more comfortable protection

‘Cushion-Fit’ Lining

- The super-soft, cushioned inner lining helps workers stay comfortable

Soft Waffle Edge

- The flexible, textured edge offers a comfortable and secure feel on the face

Soft Inner Face Seal (8833 only)

- Gives a secure, conforming fit for added comfort
- Can be cleaned for wearer hygiene if used for longer than one shift



3M™ High Performance Filter Material



Face Seal (8833 only)



3M™ Cool Flow™ Valve



M-Shaped Noseclip

3M™ Particulate Respirator 8322

Classification: EN 149:2001+A1:2009 FFP2 NR D

Protection: Dust/Mist

Maximum Usage Level: Up to 12 x TLV

FFP2

3M™ particulate respirators 8833 are also available in handy packs of 5



3M™ Respiratory Protection Equipment



3M™ Particulate Respirator 8320



3M™ Particulate Respirator 8312



FFP1
3M™ Particulate Respirator 8310
Classification: EN 149:2001+A1:2009
 FFP1 NR D
Protection: Dust/Mist
Maximum Usage Level: Up to 4 x TLV



FFP1
3M™ Particulate Respirator 8312
Classification: EN 149:2001+A1:2009
 FFP1 NR D
Protection: Dust/Mist
Maximum Usage Level: Up to 4 x TLV



FFP2
3M™ Particulate Respirator 8320
Classification: EN 149:2001+A1:2009
 FFP2 NR D
Protection: Dust/Mist
Maximum Usage Level: Up to 12 x TLV



FFP3
3M™ Particulate Respirator 8833
Classification: EN 149:2001+A1:2009
 FFP3 R D
Protection: Dust/Mist
Maximum Usage Level: Up to 50 x TLV

Braided headbands for extra comfort and durability





3M™ Cup Shaped 8825 and 8835

With this premium respirator series 3M offers ultimate safety, meeting the particular requirements of the clogging test for FFP (filtering face piece) respirators which may be used for more than one shift.

The 3M™ Respirator 8835 has exceptional comfort because of its lightweight, off-the-face design; a soft inner face-seal ring; a large surface area providing maximum filtration and ease of breathing; an exhalation valve to reduce heat build up in certain work conditions; 4-point adjustable straps and an adjustable nose clip to ensure a comfortable fit.

Features and Benefits:

Soft Inner Face-Seal Ring

- Improves seal to face
- Increases wearer comfort
- Can be cleaned for wearer hygiene if used for longer than one shift (3M™ 105 Face Seal Cleaner)

Robust Shell and Cup Design

- Robust and durable design provides multi-shift capability and a secure feel

3M™ High Performance Filter Material

- Increased filter area helps extend the life of the respirator. Higher capacity against dust
- Effective filtration with easy breathing
- Consistent high quality performance

Colour Coded Valve Lettering

- Easy to recognise protection level by colour coding (red for FFP3 and blue for FFP2 respirators)

3M™ Cool Flow™ Valve

- Effective removal of heat build up provides a cooler and more comfortable wear
- Removes exhaled air and minimises the risk of misting eyewear

Adjustable Braided Headbands

- Help achieve a more secure feel and provide comfort to face, head and neck

Compatible with

- Eyewear from 3M
- Hearing Protection from 3M



3M™ High Performance Filter Material



Face Seal



3M™ Cool Flow™ Valve



Adjustment Buckle Straps

Typical Applications

- Construction
- Ship building/repair
- Pharmaceuticals
- Welding and soldering
- Chemical processing
- Iron and steel foundries
- Battery manufacturing

3M™ Particulate Respirator 8835

Classification: EN 149:2001+A1:2009 FFP3 R D

Protection: Dust/Mist/Metal Fume

Maximum Usage Level: Up to 50 x TLV

FFP3



3M™ Particulate Respirator 8825

Classification:

EN 149:2001+A1:2009 FFP2 R D

Protection:

Dust/Mist/Metal Fume
Maximum Usage Level:
Up to 12 x TLV

FFP2



Classic Series: 3M™ Cup Shaped 8000 Series

The 3M™ Respirators 8000 Series provide lightweight, comfortable and effective respiratory protection against dust and mist. The convex shape, twin strap design, nose foam and nose clip ensure comfortable wear over a range of face sizes.

The collapse resistant shell and 3M™ Cool Flow™ Valve in the 8822 and 8812 respirators offer durable, comfortable protection particularly in hot and humid conditions.

Typical Applications

- Construction
- Ship building/repair
- Pharmaceuticals/laboratories
- Rubber/plastics
- Iron and steel foundries
- Agrochemicals
- Agriculture
- Base metal manufacture
- Powdered chemicals

Features and Benefits:

Comfort

- Traditional convex shape, with nose clip and twin strap design
- Comfortable, lightweight, off-the-face design

Safety

- Reliable, effective protection against fine particles
- Durable, collapse resistant inner shell

3M™ Cool Flow™ Valve

- Effective removal of heat build up provides a cooler and more comfortable wear
- Removes exhaled air and minimises the risk of misting eyewear

Compatible with

- Eyewear from 3M
- Hearing Protection from 3M



3M™ High Performance Filter Material



3M™ Cool Flow™ Valve

3M™ Particulate Respirator 8822

Classification: EN 149:2001+A1:2009

FFP2 NR D

Protection: Dust/Mist

Maximum Usage Level: Up to 12 x TLV

FFP2

Unvalved



3M™ Particulate Respirator 8710E

Classification:

EN 149:2001+A1:2009 FFP1 NR D

Protection: Dust/Mist

Maximum Usage Level: Up to 4 x TLV

FFP1



3M™ Particulate Respirator 8810

Classification:

EN 149:2001+A1:2009 FFP2 NR D

Protection: Dust/Mist

Maximum Usage Level: Up to 12 x TLV

FFP2

Valved



3M™ Particulate Respirator 8812

Classification:

EN 149:2001+A1:2009 FFP1 NR D

Protection: Dust/Mist

Maximum Usage Level: Up to 4 x TLV

FFP1

3M™ Particulate Respirators 8710E, 8810 and 8822, also available in handy packs of 5





Comfort Series: 3M™ Aura™ Flat Fold 9400+ Series

3M™ Aura™ Respirators 9422+ and 9432+ provide reliable and comfortable protection from a range of airborne particulate hazards while minimizing contamination risks to food or pharmaceutical production processes. They are made without staples or small detachable parts and are metal and visually detectable. Built on the innovative 3M™ Aura™ platform, the disposable respirators 9422+ and 9432+ fit a wide range of face shapes and sizes. Comfortable to wear and easy to breathe through they are ideal for use in hot humid environments.

Typical Applications

- Food and beverage
- Pharmaceuticals

Features and Benefits:

Metal Detectable

- Embedded metal nose clip kept securely in place within the layers of the respirator to help ensure the safety of your production

Staple-free

- To help minimise contamination risks to your production

Sculpted Nose Panel

- Curved low profile design helps provide a good field of vision and improves compatibility with eyewear
- Conforms well to nose and eye contours

Embossed Top Panel

- Helps reduce the fogging of eyewear

Foldable – Proprietary 3-Panel Design

- Ingenious 3-panel design fits a wide range of face shapes and sizes
- Accommodates your facial movements
- Collapse resistant: ideal for work in hot humid environments

3M™ Cool Flow™ Valve

- Effectively removes heat build up provides a cooler and more comfortable wear
- Removes exhaled air and minimises the risk of fogging eyewear

Distinguishable Non-Food Colour

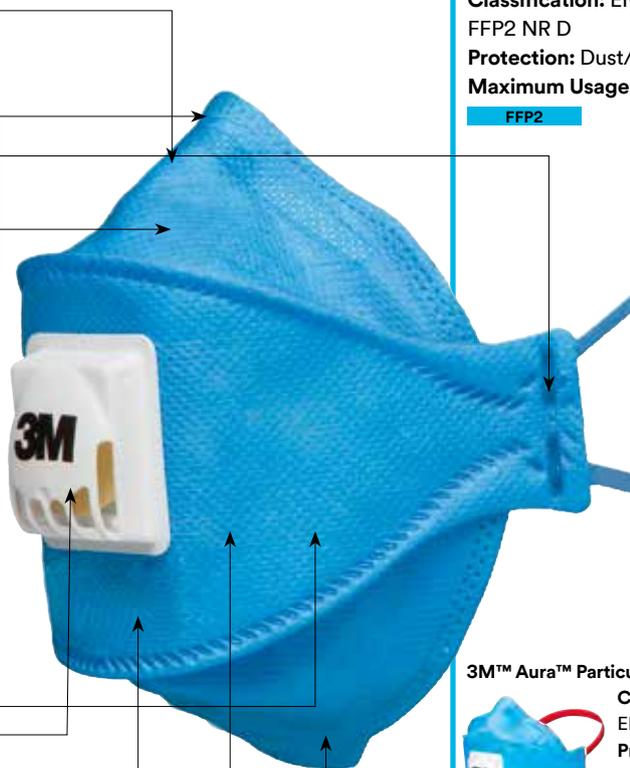
Bright blue for quick search recognition

Low Breathing Resistance Filter Technology

- Combines the benefits of 3M's electret particulate filter material with advanced low breathing resistance filter technology
- Improved breathing ease and comfort

Chin Tab

- Improves ease of donning and adjustment, to help achieve a comfortable fit



3M™ Aura™ Particulate Respirator 9422+

Classification: EN 149:2001+A1:2009 FFP2 NR D

Protection: Dust/Mist

Maximum Usage Level: Up to 12 x TLV

FFP2

3M™ Aura™ Particulate Respirator 9432+

Classification:

EN 149:2001+A1:2009 FFP3 NR D

Protection: Dust/Mist

Maximum Usage Level:

Up to 50 x TLV



FFP3

Individual Packaging

- Hygienic individual packaging helps protect the respirator from contamination before use
- Allows practical storage and dispensing in the workplace



3M™ Low Breathing Resistance Filter Technology



Foldable Three-Panel Design



3M™ Cool Flow™ Valve



Welding Fume Respirators

The 3M™ Welding Fume Respirators 9925 and 9928 provide lightweight, effective, comfortable and hygienic respiratory protection against dust, mist and metal fumes and resist clogging for extended use against welding fume. The convex shape enhances wearer comfort; the 3M™ Cool Flow™ Exhalation Valve reduces heat build up, particularly in hot humid work conditions. The 4-point adjustable straps and adjustable nose clip help achieve a comfortable fit. The 3M respirators 9925 and 9928 have been designed specifically for welding applications to provide protection against ozone and welding fumes, plus relief from nuisance odours.

Typical Applications

- Construction
- Base metal manufacture
- Ship building/repair
- Potteries
- Powdered chemicals
- Welding and soldering
- Iron and steel foundries
- Metal manufacture
- Paint manufacture

Features and Benefits:

Robust Shell and Cup Design

- Flame retardant outer surface minimises the effect of welding splatter
- Conforms well to most face shapes and sizes
- Collapse-resistant

Soft Inner Face-Seal Ring (9928 only)

- Provides secure feel
- Improves wearer comfort
- Can be hygienically cleaned if used for longer than one shift (3M™ Faceseal Cleaner 105)

3M™ Cool Flow™ Valve

- Effective removal of heat build up provides a cooler and more comfortable wear
- Removes exhaled air and minimises the risk of misting eyewear

Colour Coded Valve Lettering

- Easy to recognise protection level (FFP2) by colour coding

Carbon Layer

- Provides protection against ozone gas and relief from nuisance level odours (below TLV)

Adjustable Braided Headbands

- Help provide comfort to face, head and neck

Compatible with

- Eyewear from 3M
- Hearing Protection from 3M
- 3M™ Speedglas™ Welding Headtop
- Welding shields – low profile design for compatibility with welding shields



3M™ High Performance Filter Material



Face Seal (9928 only)



3M™ Cool Flow™ Valve



Adjustment Buckle Straps



Activated Carbon

3M™ Welding Particulate Respirator 9928

Classification: EN 149:2001+A1:2009 FFP2 R D

Protection:

Dust/Mist/Ozone/Nuisance level odours

Maximum Usage Level: 10 x TLV for Ozone

10 x TLV for Particulates

Below TLV for nuisance odours

FFP2



3M™ Welding Particulate Respirator 9925

Classification: EN 149:2001+A1:2009 FFP2 NR D

Protection: Dust/Mist/Ozone/Nuisance level odours

Maximum Usage Level:

10 x TLV for Ozone

10 x TLV for Particulates

FFP2

3M™ particulate respirators 9925 are also available in handy packs of 5





Speciality Series Respirators

The Speciality Series by 3M have been developed to provide lightweight, effective, comfortable and hygienic respiratory protection for particular working environments ranging from welding to waste sorting.

These speciality respirators which protect against dust and mist also feature an integrated activated carbon layer, offering relief from nuisance odours below TLV and, depending on the product type, from low levels of organic vapours or acid gases.

Features and Benefits:

Robust Shell and Cup Design

- Conforms well to most face shapes and sizes
- Maintains its shape well during use
- Collapse-resistant

3M™ High Performance Filter Material

- Effective filtration with easy breathing
- Consistent high quality performance

3M™ Cool Flow™ Valve

- Effective removal of heat build up provides a cooler and more comfortable wear
- Removes exhaled air and minimises the risk of misting eyewear

Carbon Layer

- Provides protection against nuisance level organic vapours (below TLV)

Colour Coded Straps

- Easy to recognise performance level by colour coded straps

Compatible with

- Eyewear from 3M
- Hearing Protection from 3M



3M™ High Performance Filter Material



3M™ Cool Flow™ Valve



Face Seal (9936 only)



Activated Carbon



3M™ Speciality Particulate Respirator 9936
Classification: EN 149:2001 +A1:2009 FFP3 R D
Protection: Dust/Mist/Nuisance Level Acid Gas
Maximum Usage Level: Up to 50 x TLV for Particulates; below TLV for Acid Gases

FFP3



3M™ Speciality Particulate Respirator 9921 and 9926
Classification: EN 149:2001+A1:2009 FFP2 NR D
Protection: Dust/Mist/Nuisance Level Acid Gas
Maximum Usage Level: Up to 12 x TLV for Particulates; below TLV for Acid Gases

FFP2

3M™ Speciality Particulate Respirator 9914

Classification:

EN 149:2001+A1:2009 FFP1 NR D

Protection: Dust/Mist/Nuisance Level

Organic Vapour

Maximum Usage Level: Up to 4 x TLV for Particulates; below TLV for Organic Vapours
 Also available in handy packs of 5

FFP1

3M™ Speciality Particulate Respirator 9906

Classification:

EN 149:2001+A1:2009 FFP1 NR D

Protection: Dust/Mist/Nuisance Level Hydrogen Fluoride

Maximum Usage Level: Up to 4 x TLV for Particulates; below TLV for Hydrogen Fluoride

FFP1

3M™ Speciality Particulate Respirator 9913

Classification:

EN 149:2001+A1:2009 FFP1 NR D

Protection: Dust/Mist/Nuisance Level Organic Vapour

Maximum Usage Level: Up to 4 x TLV for Particulates; below TLV for Organic Vapours

FFP1

3M™ Speciality Particulate Respirator 9915

Classification:

EN 149:2001+A1:2009 FFP1 NR D

Protection: Dust/Mist/Nuisance Level Acid Gas

Maximum Usage Level: Up to 4 x TLV for Particulates; below TLV for Acid Gases

FFP1

3M™ Speciality Particulate Respirator 9922

Classification:

EN 149:2001+A1:2009 FFP2 NR D

Protection: Dust/Mist/Nuisance Level Ozone

Maximum Usage Level: Up to 10 x TLV for particulates; ozone; below TLV for organic vapours

FFP2



Classic Series: 3M™ Flat Fold K100 Series

Safety is priceless, but it doesn't have to be expensive. The 3M™ Respirators K100 Series provide comfortable, solid and professional protection at an affordable price.

The K100 series also removes any doubt as to quality when it comes to choosing a value product: fully tested, certified and CE marked, all K100 products are also backed with the kind of responsive support, access to technical personnel, reliable advice as well as dependable quality and supply that only a brand like 3M can offer.

Features and Benefits:

Adjustable noseclip

- Easy to check that correct protection is being worn in the workplace
- Yellow: FFP1, blue: FFP2, red: FFP3
- Metal detectable

Synthetic headbands

- Do not contain components made from natural rubber latex
- Reduces risk of allergic reaction

Single loop strap

- Allows easy adjustment for a comfortable fit
- Staple-free

Flat-fold convenience

- Makes the respirator easy to store away when not in use

Classic Exhalation valve

- Reduces heat build up in hot or humid environments, or when work is hard and physical
- Improves breathing comfort over long periods

Diamond-shaped front panel

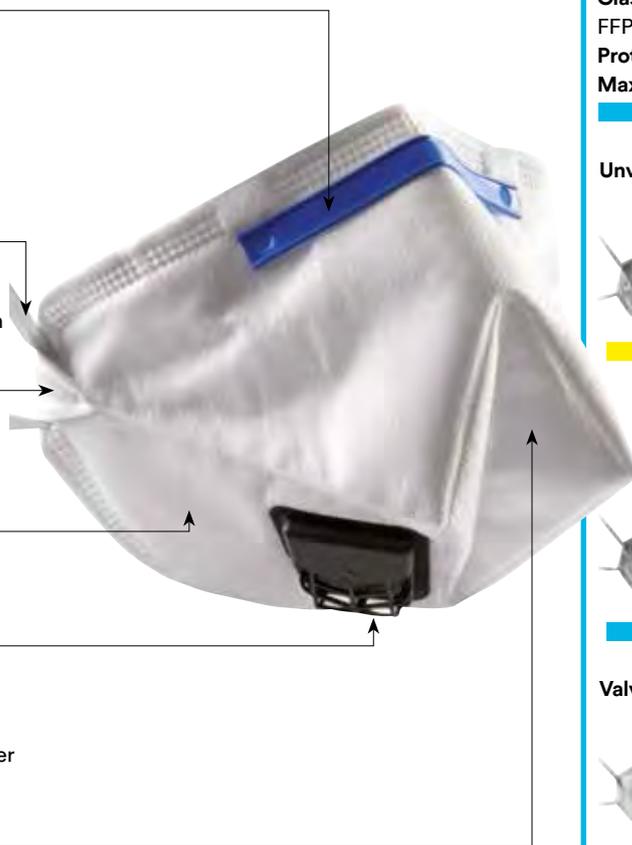
- Allows the respirator to retain its shape, even in hot or humid environments

Compatible with

- Eyewear from 3M
- Hearing Protection from 3M



3M™ High Performance Filter Material



Typical Applications

- Construction
- Mining
- Agriculture
- General manufacturing
- Woodworking
- Maintenance
- Machine building

3M™ Particulate Respirator K112

Classification: EN 149:2001+A1:2009 FFP2 NR D

Protection: Dust/Mist

Maximum Usage Level: Up to 12 x TLV

FFP2

Unvalved



3M™ Particulate Respirator K101

Classification: EN 149:2001+A1:2009 FFP1 NR D

Protection: Dust/Mist

Maximum Usage Level: Up to 4 x TLV

FFP1



3M™ Particulate Respirator K102

Classification: EN 149:2001+A1:2009 FFP2 NR D

Protection: Dust/Mist

Maximum Usage Level: Up to 12 x TLV

FFP2

Valved



3M™ Particulate Respirator K111

Classification: EN 149:2001+A1:2009 FFP1 NR D

Protection: Dust/Mist

Maximum Usage Level: Up to 4 x TLV

FFP1



3M™ Particulate Respirator K113

Classification: EN 149:2001+A1:2009 FFP3 NR D

Protection: Dust/Mist

Maximum Usage Level: Up to 50 x TLV

FFP3



3M™ Particulate Respirators K100 Series also available individually wrapped in a handy dispenser box



Classic Series: 3M™ VFlex™ Flat Fold 9100 Series

3M™ VFlex™ respirators 9152 and 9152S offer effective protection at incredible value with no compromise on quality. The unique design unfolds into roomy, comfortable space. VFlex™ respirators expand and flex with your face as you breathe, work and talk.

Positioning tabs, adjustable nose clip and a choice of two different sizes help achieve a custom fit across a broad range of faces.

Typical Applications

- Fibreglass manufacturing
- Pharmaceuticals/laboratory
- Maintenance
- Woodworking

Features and Benefits:

Adjustable Noseclip

- Helps provide a custom fit and secure seal
- Imbedded, metal detectable

Tabs

- Designed for positioning the respirator on the face

Embossed Front Panel

- Helps the respirator retain its shape, away from your mouth
- Helps maintain spacious feel

V-Shaped Pleats

- Flex and expand with mouth movement for easier talking and breathing

Comfortable inner Layer

3M™ Proprietary Media

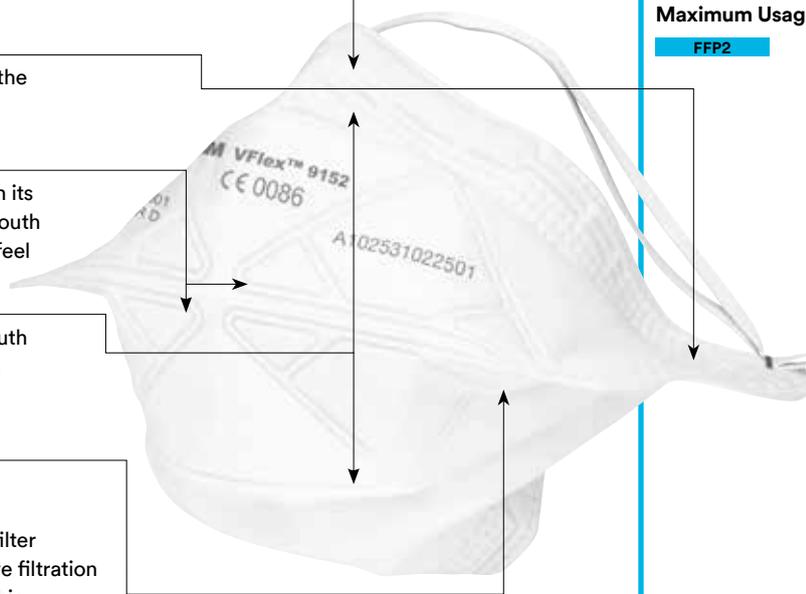
- 3M™ high performance filter material provides effective filtration combined with low breathing resistance

Flat-Fold Convenience

- Convenient storage prior to use

Additional Design Features

- Elastic headbands contain no natural rubber latex components
- Spacious feel inside, with minimal impact on field of vision
- Compatible with a variety of eyewear and hearing protection from 3M™
- Available in 2 sizes to fit a broad range of faces



3M™ VFlex™ Particulate Respirator 9152 (Standard size)

Classification: EN 149:2001+A1:2009 FFP2 NR D

Protection: Dust/Mist

Maximum Usage Level: Up to 12 x TLV

FFP2

3M™ VFlex™ Particulate Respirator 9152S (Small size)

Classification: EN 149:2001+A1:2009 FFP2 NR D

Protection: Dust/Mist

Maximum Usage Level: Up to 12 x TLV



3M™ High Performance Filter Material



Reusable Respirators

For prolonged periods of use, Half and Full Face Masks by 3M offer exceptional value and quality, all combine comfort with ease of use. 3M™ Respirators have to pass strict quality control tests and provide a consistently high level of safety.

The choice of the right mask and filter type depends on your particular working environment and individual requirements. 3M can assist you to choose the protection that helps you achieve optimum results.



The 4-Step Method

1. Identify the Hazards

Application	Hazard	Typical Protection
Painting, Spraying, Varnishing, Coating	Solvent-Based Paint**	A2P3 R
	Anti-Fouling Paint Spraying / Grinding	A2P3 R
	Water Soluble Paint	A1P2 R
	Solvents, Resins, Synthetic Resins**	A2P3 R
	Latex-Paint, Residual Solvents	A2P3 R
	Wood Preservatives	A1P2 R
Maintenance	Disinfection, Cleaning*	ABEK1P2 R
Decoration	Spray-On Glue, Foam, Varnish, Adhesive	A1P2 R
Waste Removal	Bacteria, Spores, Odours	A1P2 R
Agriculture	Pesticides, Insecticides	ABEK1P2 R
Wood Treatment	Bonding, Spray-On Glue	A2P3 R
Construction, Grinding, Cutting, Drilling	Tarring	A2P3 R
	Sealing	A1P2 R
	Spray Foam Insulation	A1P2 R
Coating	Organic Solvent/with boiling point less than 65 C	AXP3 R
	Ammonia Based Paint Remover	ABEK
	Polyurethane Coating**	ABEK1P3 R
	Solvent Based Varnish	A2
	Water Based Varnish	A1
Bonding	Solvent containing Adhesives	A1
Handling	Sulphur Dioxide	ABE
	Hydrochloric Acid	ABE
	Liquid Manure	ABEK
	Ammonia	K
	Formaldehyde	A1 + Form
	Hazardous goods storage/transport	ABEK1P3 R

Warning:

This guide is only an outline. It should not be used as the only means for selecting a respirator. Details regarding performance and limitations are set out on the respirator package and user instructions. Before using any of these respirators, the wearer must read and understand the user instructions for each product. Specific country legislation must be observed.

* excluding Formaldehyde

** for occurrence of Isocyanates, please contact the 3M Customer Helpline +44 (0) 870 60 800 60 or your local 3M office



- White – Particulate Protection
- Brown – Organic Vapours Protection
- Grey – Inorganic Vapours Protection
- Yellow – Acid Gases Protection
- Green – Ammonia and its Derivatives



2. Assess the Risk

Application limits for reusable half and full face masks

Filter Classification	NPF* with 3M Half Mask	NPF* with 3M Full Face Mask
P1	4 x OEL**	5 x OEL
P2	10 x OEL	10 x OEL
P3	50 x OEL	200*** x OEL
Class 1 Gas and Vapour filters	10 x OEL or 1000ppm (whichever is lower)	200*** x OEL or 1000ppm (whichever is lower)
Class 2 Gas and Vapour filters	10 x OEL or 5000ppm (whichever is lower)	200*** x OEL or 5000ppm (whichever is lower)

AX-Filter for low boiling point (organic composition with a low boiling point under 65 °C). AX-Filter should only be fitted to 3M™ Full Face masks. AX filters may only be used for a single shift.
 A1 and A2 Filter for organic vapour with a boiling point above 65 °C.

* Country APF should be used where available.

**OEL please use local exposure limit.

*** Not the NPF

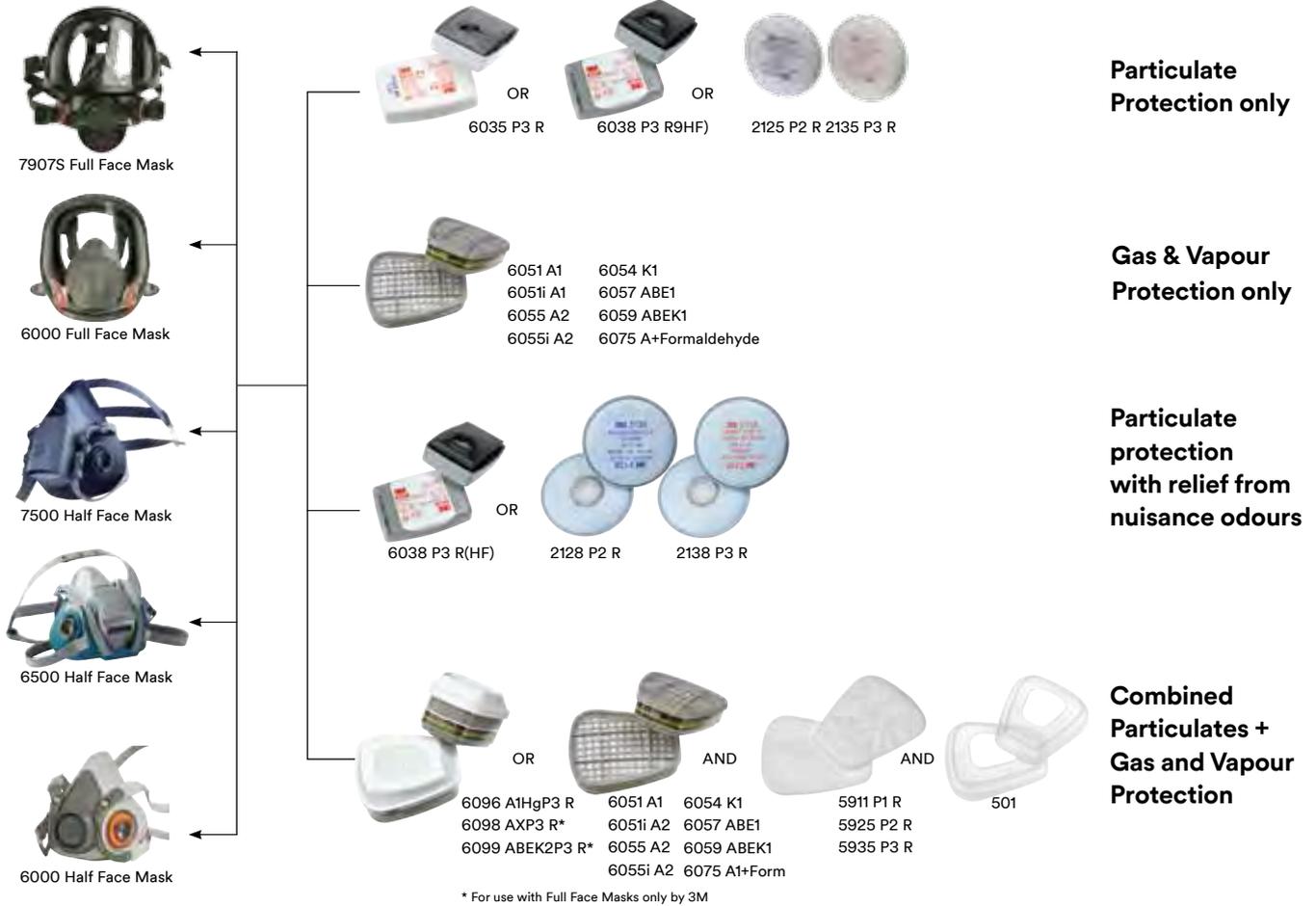
NPF = Nominal Protection Factor
 OEL = Occupational Exposure Limit
 ppm = parts per million

3.1 Select the Right Respirator

3M™ Reusable Respirator Series	4000	6000	6500	7500	6000	7907S
						
	Half Masks	Half Masks	Half Masks	Half Masks	Full Face Masks	Full Face Masks
Durable		●	●	●	●	●
Maintenance-free	●					
Ready to use	●					
Comfortable	●	●	●	●	●	●
Lightweight	●	●	●	●	●	●
Easy to fit	●	●	●	●	●	●
Adjustable head bands	●	●	●	●	●	●
Drop Down feature			● (QL)	●		
Easy-to-clean		●	●	●	●	●
Quick de-assembly for maintenance			●	●		
3M™ Cool Flow Valve			●	●	●	
Compatible with 3M Supplied Air System		●	●	●	●	●
Modular replacement filter system		●	●	●	●	●
Variety of filters	●	●	●	●	●	●
Eye Protection					●	●
Six-point head harness						●
Speaking diaphragm						●
Spare parts		●	●	●	●	●
Accessories	●	●	●	●	●	●
Multiple sizes available		●	●	●	●	
Colour coded sizes		●		●	●	



3.2 Select the Right Filter



Optional 3M™ S-200+ Supplied Air System compatible with 3M™ Reusable Respirator Series



4. Train in Fitting and Use

Make sure you know how to use and maintain your Respiratory Protective Equipment to ensure effective respiratory protection. 3M sales and technical professionals can help you to define your training needs and can provide training and on-site consultations on all aspects of respiratory protection tailored to your individual needs. You'll also find easy to use training on our website: www.3M.eu/occsafety

Reusable Respirator Care & Maintenance

3M™ Reusable Respiratory Equipment requires regular checks and maintenance to ensure optimum performance and protection for the wearer. In addition to potentially reducing protection levels, poor maintenance can also reduce the effective lifetime of the equipment, resulting in the additional cost of replacement. Guidance on the appropriate checks is provided in the instruction booklets with each new item.




3M™ 7500 Series Half Mask Cleaning and Inspection

Before Use

- Inspect respirator for incorrectly fitted and/or damaged parts. Replace if necessary
- Inspect the exhalation valve and seat. Any damaged or deteriorated valves should be replaced

Monthly

- Carry out all the 'Before Use' inspections
- Check:
 - Face Seal
 - Straps and Head harness
 - Valves
- Create record of this monthly check

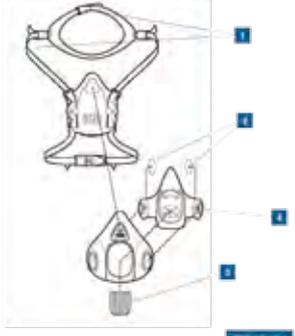
After Use

- Cleaning is recommended after each use
- Remove the gas/vapour and/or particulate filters
- Clean with 3M 105 wipe or by immersing in warm cleaning solution, water temperature not to exceed 50°C and scrub with a soft brush until clean
- Rinse in fresh warm water
- Air dry in a non-contaminated atmosphere

Ordering Consumables, Repair Parts and Accessories
To request a quote or place an order for these items, please contact your 3M Approved Distributor.

Further Information and Advice
If you require additional guidance on Care and Maintenance of your 3M Reusable Respirators, please contact the helpline.

3M Health and Safety Helpline
0870 60 800 60 (UK)
1 800 320 500 (Ireland)



Callout	Part Name	3M Part Number
1	Head Harness	7501
2	Inhalation Valve	7502
3	Exhalation Valve	7503
4	Filter Holder	7506

REPLACE ALL DAMAGED PARTS IMMEDIATELY TO ENSURE CORRECT LEVELS OF PROTECTION

Occupational Health & Environmental Safety Group
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Product 100000
Printed in the United Kingdom
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Example of a 3M™ Reusable Respirator Cleaning and Inspection Sheet



Respirator Select and Service Life Software

3M have designed state of the art software to help make the selection of 3M™ Respirators and filters easier. The user-friendly software also helps users estimate the service life of 3M™ Gas and Vapour Filters and helps determine how to use the NEW 3M™ 6051i and 6055i filters that feature the 3M™ End of Service Life Indicator (ESLI).

The 3M™ Select and Service Life Software simplifies and speeds up the selection of 3M™ Respirators through a user-friendly interface that allows the user to enter contaminants and their concentrations.

With the ability to analyse more than 700 different chemicals, and mixtures of chemicals, the software provides a series of prompts to the user to select an appropriate respirator. A record is also provided of the choices made by the user.

Respiratory filters have a limited service life, this is the estimated period of time before breakthrough of a chemical for a specific filter. Respiratory protection standards and/or good practice often require users of chemical filter respirators to implement a filter change schedule based on "objective information or data" to help prevent worker overexposure.

The 3M™ Select and Service Life Software offers the additional capability of estimating the frequency of replacement of 3M™ Gas and Vapour Filters. The software calculates service life based on workplace conditions such as contaminant concentration. This information can then be used to establish a filter change schedule.

ESLI Software



The 3M™ Gas & Vapour Service Life Indicator Filters 6051i and 6055i feature an End of Service Life Indicator (ESLI). The ESLI software can help you determine if you can rely on the ESLI as your primary filter change plan.

3M™ Select Software



3M™ Select Software is designed to help you choose the appropriate 3M™ Respirator for your work environment.

3M™ Service Life Software



The Service Life calculation is designed to help you estimate the service life of selected 3M™ Gas and Vapour Filters.

To use the software simply visit:
www.3M.eu/SLS





3M™ Filters for use with Reusable Respirators

3M has developed a broad range of filters for use with its half and full face masks that offer effective protection against gases, vapours and particles. The unique Bayonet Filter Attachment System allows the filters to just be clicked into place ensuring optimum ease of use.

3M™ Particulate Filters 2000 Series

Filter	Protection level	Protection against
2125	P2 R	solid and liquid particles
2128	P2 R	solid and liquid particles. Plus ozone protection 10 x TLV and organic vapours/acid gas below TLV
2135	P3 R	solid and liquid particles
2138	P3 R	solid and liquid particles. Plus ozone protection 10 x TLV and organic vapours/acid gas below TLV
502**		filter retainer

3M™ Particulate Filters 5000 Series

Filter	Protection level	Protection against
5911†	P1 R	solid and liquid particles
5925†	P2 R	solid and liquid particles
5935†	P3 R	solid and liquid particles
501		filter retainer
603		filter platform

3M™ Gas and Vapour Filters 6000 Series

Filter	Protection level	Protection against
6051	A1	organic gases & vapours boiling point (bp)>65°C
6054	K1	ammonia and derivatives
6055	A2	organic vapours bp>65°C
6057	ABE1	organic vapours bp>65°C, inorganic vapours and acid gases
6059	ABEK1	organic vapours (bp>65°C), Inorganic vapours, acid gases ammonia and its derivatives.
6075	A1+ formaldehyde	organic vapours bp>65°C and formaldehyde

3M™ Gas, Vapour and Particulate Filters 6000 Series

Filter	Protection level	Protection against
6096	A1 HgP3 R	organic vapours bp>65°C, mercury vapours and particulates
6098*	AXP3 NR	single compound organic vapours (bp<65 °C) and particulates
6099*	A2B2E2K2P3 R	organic vapours, inorganic vapours and acid gases bp>65°C, ammonia, derivatives and particulates

* Only for full face masks.
The filters of the 6000 Series conform with the European Standards: EN14387 and/or EN143.



3M™ Gas and Vapour Filters with 3M™ Service Life Indicator 6000i Series

Filter	Protection Level	Protection against
6051i	A1	organic gases & vapours bp> 65°C with 3M end of service life indicator
6055i	A2	organic vapours bp> 65°C with 3M end of service life indicator

* Please see the 6051i and 6055i User Instructions or the 3M™ Select and Service Life Software to determine if these filters are appropriate as a primary change out method for your work environment.

It is important to change your gas and vapour filters at the right time; using the filter for longer can lead to break-through of hazard into the mask. Service life is the term used to describe how long a set of filters can be used before they need to be changed.

*The ESLI is only appropriate as a primary change out method for certain organic vapours and exposure concentrations, must also be less than the workplace exposure limit (WEL).

3M™ Particulate Filters 6035/6038 Series

Filter	Protection level	Protection against
6035	P3 R	solid and liquid particles – in solid plastic case for rough application
6038	P3 R	solid and liquid particles. Hydrogen Fluoride gas up to 30 ppm and relief from nuisance level organic vapours and acid gases below TLV in solid plastic case for tough applications
502**		filter retainer

** 502 filter retainer, allows 6000 series Gas and Vapour filters to be combined with 2000 series or 6000 series particulate filters.

† 5000 series filters can be used with 6000 series filters for combined gas and particulate protection in conjunction with a 501 filter retainer, and without the 6000 series filters in conjunction with a 603 filter platform and a 501 filter retainer.



3M™ Organic Gas & Vapour Service Life Indicator Filters – 6000i Series Filters

Proudly introducing the 3M™ Organic Gas & Vapour Filters with 3M™ Service Life Indicator technology.

Unique to 3M, these innovative and easy-to-use filters have an end-of-service-life indicator (ESLI) to help users to determine when to change their filters in appropriate environments*.

Compatible with any 3M Reusable mask, apart from the 4000 Series, the 6051i and 6055i filters can be used to complement or replace your current filter change schedule.

Features and Benefits:

- Designed to indicate service life based on individual exposure and respiratory use patterns
- An efficient and effective visual tool to help determine when to change filters
- Helps provide added peace of mind, and can help increase compliance with your company's respirator policy and industry regulatory requirements
- CE approved as A1 (6051i) and A2 (6055i) organic vapour filters against certain organic gases and vapours PLUS all of the features you would find in standard 3M Gas & Vapour Filters

Simple indicator bar

Helps users determine when to change filters.



Removable label

Helps protect Indicator from overspray and debris.



3M™ Organic Gas and Vapour Service Life Indicator Filter 6051i

3M™ Organic Gas and Vapour Service Life Indicator Filter 6055i



Who can benefit?

The 3M Service Life Indicator can be used to complement or replace your current filter change schedule. It is only recommended as a primary change method for certain organic vapours and exposure levels.

To determine if the ESLI may be used as the primary method for determining your filter schedule:

- 1 Perform exposure monitoring to quantify the organic vapour exposure levels in your workplace (See www.3M.co.uk/exposedetection for guidance).
- 2 Enter the monitoring results in the 3M™ Select and Service Life Software (www.3M.co.uk/filterservicelife). If the ESLI is not applicable as a primary method, it may still be used to complement your current filter change schedule.

It is important to change your gas and vapour filters at the right time; using the filter for longer can lead to break through of hazard into the mask. Service Life is the term used to describe how long a set of filters can be used before they need to be changed.

The ESLI is only appropriate as a primary change out method for certain organic vapours and exposure concentrations must also be less than the workplace exposure limit (WEL)

*Please see the 6051i and 6055i User Instructions or the 3M™ Select and Service Life Software to determine if these filters are appropriate as a primary change out method for your work environment.



3M™ Maintenance Free Reusable Respirators 4000 Series

Since its introduction, the 3M 4000 Series has been the first choice 3M Reusable Respirator by health and safety managers across Europe*. With no parts assembly or maintenance required this simple, lightweight, well balanced respirator offers reliable respiratory protection against a range of gases, vapours and particulates typically found in a variety of industries. A unique bonded carbon technology allows the respirator to sit close to the face and fit well under many other types of protective equipment, providing an undisturbed field of vision and a more comfortable worklife.

Features and Benefits:

Comfortable, Effective Protection

- Low profile design for better peripheral vision
- Lightweight, well balanced design
- Soft, non-allergenic material with textured face seal
- Proven to consistently exceed EU standard requirements for breathing ease¹

Convenience

- One piece, maintenance-free construction
- Four versions available, each offering protection against differing hazards throughout industry
- Resealable bag provides convenient and clean storage between uses

Cooler Wear

- Central position of the exhalation valve for effective removal of heat and moisture build up within face piece

Adjustability

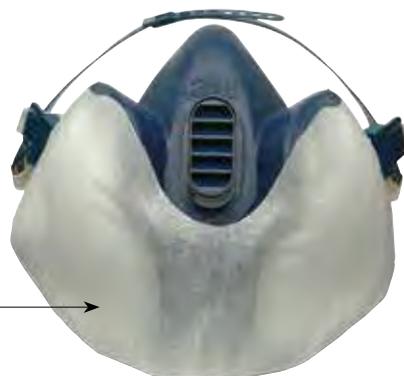
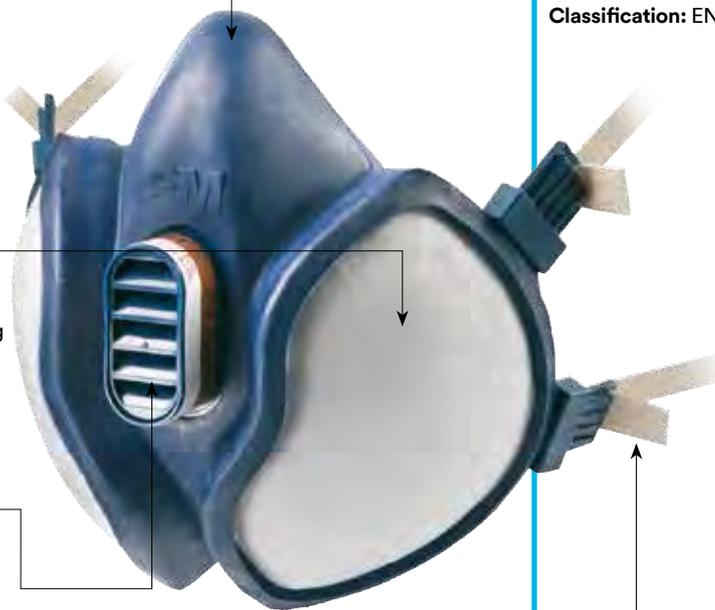
- Helps to achieve a stable secure fit
- Easy to fasten neck strap

Cost Effective

- Use until damaged, particulate filters clog or gas filters become saturated
- Proven to consistently exceed minimum standards for filter service life² which can help postpone the need for respirator replacement and, overtime, represent a budget gain

Accessories

- 3M™ Overspray Guard 400 is available to help prolong the life of the main particulate filters



3M™ Maintenance Free Respirator 4251
Classification: EN405:2001+A1:2009

Compatible with:

- Eyewear from 3M
- Hearing Protection from 3M

3M™ Maintenance Free Respirator 4000 series available:

3M™ Reusable Respirator 4251
 Organic Vapour* + Particulates
 FFA1P2 R D

3M™ Reusable Respirators 4255
 Organic Vapour* + Particulates
 FFA2P3 R D

3M™ Reusable Respirator 4277
 Organic Vapour* / Inorganic Vapours + Acid Gas / Particulates
 FFABE1P3 R D

3M™ Reusable Respirator 4279
 Organic Vapour* / Inorganic Vapours + Acid Gas / Ammonia / Particulates
 FFABEK1P3 R D

*Based on sales of 3M reusable respirators in Europe Middle East and Africa between 2010 and 2013.

¹INSPEC INTERNATIONAL Test Report 1.10.06.29 and ongoing quality release data

²Tested by 3M, ongoing quality release data. For example in 2012: 300 products tested, all samples exceeded EN 405 minimum level gas and vapour filter capacity.

* Organic vapours boiling point>65 degrees C



3M™ Reusable Half Masks 7500 Series

The 7500 Series Respirators by 3M have set a new standard in comfort. This facepiece was designed with the wearer in mind. Its soft sealing surface, along with the unique 3M™ Cool Flow™ Valve, enhances wearer comfort and face fit. Reduced breathing resistance helps to minimise heat build-up in the mask and increases your comfort.

Available in three sizes, all masks have the 3M™ Bayonet Attachment System offering a broad range of twin lightweight filters to protect against gases, vapours and particulates depending on your individual needs and can also be used with 3M™ Supplied-Air Systems.

Features and Benefits:

Head Harness

- Balanced, secure fit
- Reduced pressure and tension points

Facepiece

- DropDown feature for added convenience during breaks
- Designed for compatibility with 3M Head and Eye protection
- Soft silicone face piece material for comfort and durability
- Thin nose bridge area for more comfort
- Fully maintainable
- Low weight of 136 gr.

3M™ Cool Flow™

Exhalation Valve

- Less exhalation resistance
- Easier breathing
- Less heat and sweat build-up
- Reduces valve vibration
- Downwards flow of exhaled air
- Stays clean



Low-Profile Design

- Minimises interference with field of view
- Minimised dirt-traps
- Reduced fogging with eye protection
- Sleek look and feel

Filter Connection

- Twin filter design provides lower breathing resistance
- Better weight distribution and more balanced fit
- Improved peripheral vision
- Safe and secure fit
- Optical marking of attachment point
- Flexible System for gas, vapour, particulate filters
- Optional supplied-air connection

Plus

- Full range of spares available
- Available in three sizes distinguished by different colours



3M™ Half Mask 7503 (Large)

Classification: EN140:1998

3M™ Half Mask 7501 – small (grey blue)

3M™ Half Mask 7502 – medium (light blue)

3M™ Half Mask 7503 – large (dark blue)

Compatible with:



- 3M™ S-200+ Supplied Air System
- 3M Protective Eyewear
- 3M Hearing Protection

Ready-to-Use Respirator Packs

3M™ Reusable Half Masks 7500 Series



See page 47 for 3M™ Half Mask Accessories



3M™ Reusable Half Masks 6500 Series

The 3M™ Reusable Half Masks 6500 Series have been designed with tough and dirty work environments in mind. Stay productive and protected – the 6500 Series delivers durability and stability with a firm, lightly textured silicone faceseal and strong body construction. There are two versions of the 6500 Series available - the 6500QL Series featuring the Quick Latch Drop Down mechanism and the 6500 Series (Standard). Both versions are available in three sizes.

Features and Benefits:

Overmoulded, Low-Profile Design

- Simplified cleaning and maintenance with minimal parts and crevices
- Advanced half mask design for a wide field of view
- Compatibility with 3M™ welding/grinding shields

Adjustable Head

Harness Assembly

- Optimum fit and comfort with three-size adjustable head cradle
- Durable harness straps

Silicone Faceseal

- Provides comfort and stability with a soft but firm faceseal
- Extended product life due to resilient silicone material
- Lightweight
- Keeps its shape in high-heat environments
- Available in three sizes (S, M and L)

3M™ Bayonet Connection

- Flexible bayonet system for connection to a wide range of 3M™ gas, vapour and particulate filters

Valve Cover Design

- Directs exhaled breath and moisture downward
- Easy positive pressure seal check

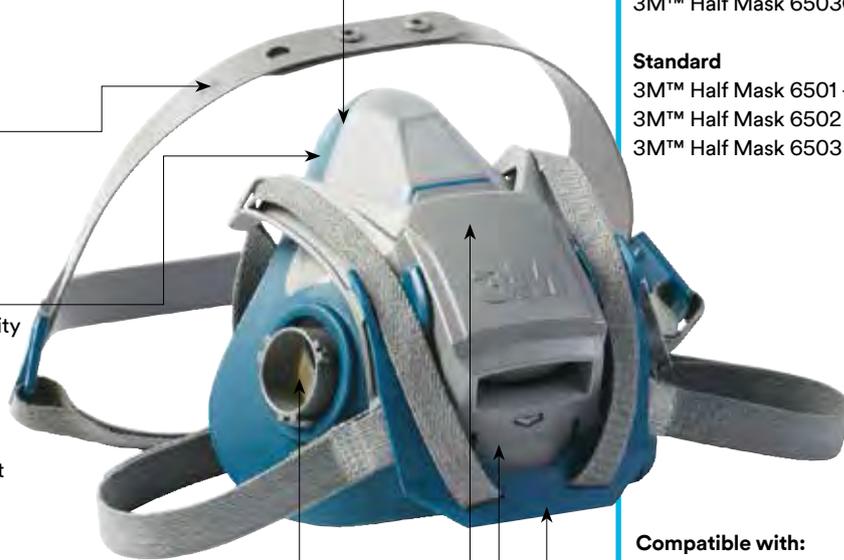
3M™ Cool Flow™ Exhalation Valve

- Enhanced comfort by reducing heat and moisture
- Less exhalation resistance makes breathing easier

Quick Latch (QL) - Drop Down Mechanism*

- Easy on and off as you move in and out of contaminated areas
- No need to remove your safety helmet or face shield when lowering or raising your respirator

*QL version only



3M™ Reusable Half Mask 6501QL - small with Quick Latch

- 3M™ Half Mask 6501QL - small
- 3M™ Half Mask 6502QL - medium
- 3M™ Half Mask 6503QL - large

Standard

- 3M™ Half Mask 6501 - small
- 3M™ Half Mask 6502 - medium
- 3M™ Half Mask 6503 - large

Compatible with:



- 3M™ S-200+ Supplied Air System
- 3M Protective Eyewear
- 3M Hearing Protection

See page 47 for 3M™ Half Mask Accessories



3M™ Reusable Half Masks 6000 Series

The 3M™ Reusable Half Masks 6000 Series are economical, low-maintenance, simple to handle and lightweight. Available in three sizes, all masks have the 3M™ Bayonet Connection System allowing connection to a broad range of twin filters to protect against gases, vapours and particulates depending on your individual needs. 6000 series half masks by 3M can also be used with 3M™ Supplied Air Systems for your increased convenience and flexibility

Features and Benefits:

Head Harness

- Designed for compatibility with other 3M Head and Eye protection
- Cradle suspension for comfortable fit
- Easy to fasten neck strap

Facepiece

- Three colour coded sizes for easier identification
- Lightweight elastomeric material for comfort during long periods of work
- Ultra-low weight of 82g
- Reducing maintenance costs to minimum

Low-Profile Design

- Minimises interference with field of view
- More simplicity for easy handling

Filter Connection

- Twin filter design provides lower breathing resistance
- Better weight distribution and a more balanced fit
- Improved peripheral vision
- Safe and secure fit
- Optical marking of attachment point
- Flexible System for gas, vapour, particulate filters
- Optional supplied-air connection

Plus

- Spare parts available
- Available in three sizes distinguished by different colours



3M™ Half Mask 6200 (Medium)

Classification: EN140:1998

- 3M™ Half Mask 6100 – small (light grey)
- 3M™ Half Mask 6200 – medium (grey)
- 3M™ Half Mask 6300 – large (dark grey)

Compatible with:

- Eyewear from 3M
- Hearing Protection from 3M

Accessories for 3M Half Masks



3M™ Half Mask Carry Bag 106



3M™ Face Seal Wipe 105

Ready-to-Use Respirator Packs

3M™ Reusable Half Masks 6000 Series





3M™ Reusable Full Face Mask 7907S

The 3M™ Full Face Mask 7907S offers durability and safety for demanding tasks that require face and respiratory protection. The 3M™ Bayonet Connection System offers a broad range of twin lightweight filters to protect against gases, vapours and particulates depending on your individual needs.

The 7907S full face mask by 3M can also be used with Supplied Air Systems by 3M for your increased convenience and flexibility.

Features and Benefits:

Six Strap Head Harness

- Easy and secure fit for maximum safety
- Provides greater stability
- Easy release buckles

Full Face Lens

- Large polycarbonate lens with wide field of view
- Spectacle kit and lens covers available

Facepiece

- Double face sealing for safe, secure fit to most face sizes
- 6 Strap suspension
- Silicone rubber one-size-fits-all
- Highly durable
- Range of consumables available
- Speech Diaphragm for improved communication

Filter Connection

- Twin filter design provides lower breathing resistance
- Better weight distribution and more balanced fit
- Improved peripheral vision
- Safe and secure fit
- Flexible System for gas, vapour, particulate filters
- Optional supplied-air connection



3M™ Full Face Mask 7907S (Silicone)

Classification: EN136 (Class 2)

Compatible with:

- Hearing Protection from 3M

Accessories for 3M™ Full Face Masks



3M™ Face Seal Wipe 105



3M™ Full Face Carry/Storage Bag 107



3M™ Reusable Full Face Masks 6000 Series

The 3M™ Full Face Masks 6000 Series are simple to handle and comfortable to wear. The exhalation port provides increased durability and is easy to keep clean. Available in three sizes, all masks have the 3M™ Bayonet Connection System enabling connection to a broad range of twin lightweight filters to protect against gases, vapours and particulates depending on your individual needs.

Features and Benefits:

Full Face Piece

- Soft, non-allergenic elastomeric face piece
- Extremely lightweight (400 grams) for high comfort

Full Face Lens

- Broad field of vision
- Polycarbonate lens, scratch and impact resistant to EN166:2001 B

4 Strap Head Suspension

- Easy to put on and take off
- Well balanced

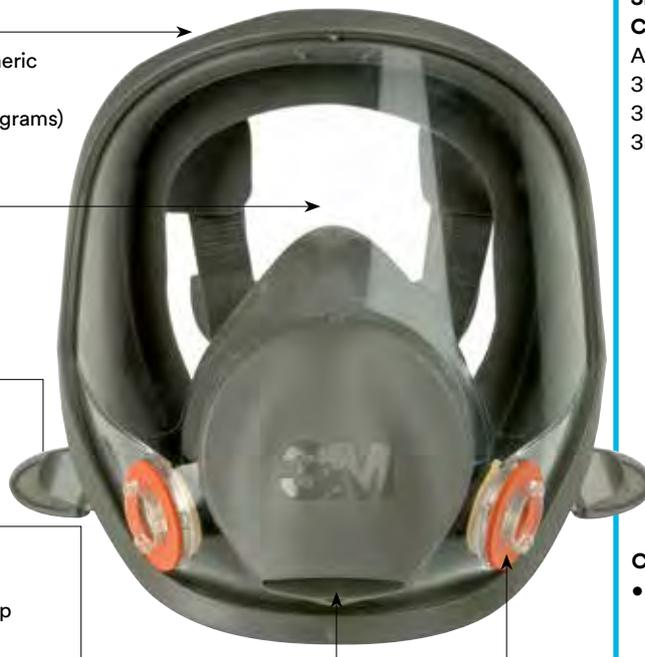
3M™ Cool Flow™

Exhalation Valve

- Less exhalation resistance
- Easier breathing
- Less heat and sweat build-up
- Reduces valve vibration
- Downwards flow of exhaled air
- Minimised dirt-traps to stay clean
- Sleek look and feel

Filter Connection

- Twin filter design provides lower breathing resistance
- Better weight distribution and more balanced fit
- Improved peripheral vision
- Safe and secure fit
- Optical marking of attachment point
- Flexible System for gas, vapour, particulate filters
- Optional supplied-air connection



3M™ Full Face Mask 6800 (Medium)

Classification: EN136:1998 (Class 1)

Available in three sizes:

3M™ Full Face Mask 6700 - small

3M™ Full Face Mask 6800 - medium

3M™ Full Face Mask 6900 - large

Compatible with:

- Hearing Protection from 3M

Accessories for 3M™ Full Face Masks



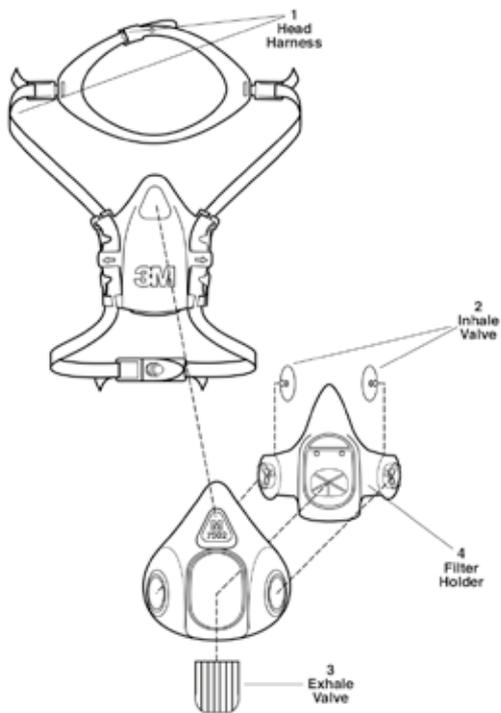
3M™ Face Seal Wipe
105



3M™ Full Face Carry/
Storage Bag 107

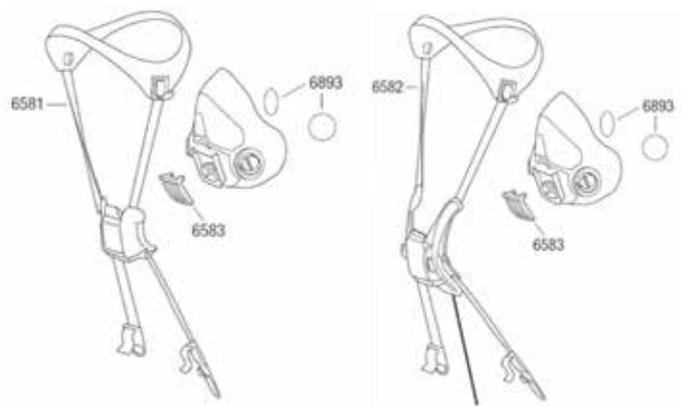
Reusable Respirator Spares and Accessories

Half Masks



3M™ 7500 Series Half Mask

#	Description	Part Number
1	Head Harness	7581
2	Inhalation Valve	7582
3	Exhalation Valve	7583
4	Filter Holder	7566



3M™ 6500 and 6500QL Series Half Masks

#	Description	6500 Part Number	6500QL Part Number
1	Head Harness Assembly/ Quick Latch Head Harness Assembly	6581	6582
2	Exhalation Valve	6583	6583
3	Inhalation Valve	6593	6893

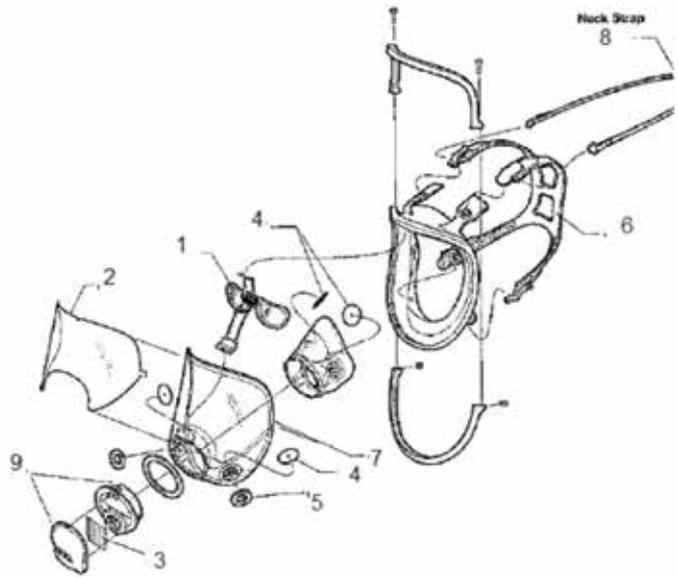


3M™ 6000 Series Half Mask

Description	Part Number
Inhalation Valve Gasket	6895

Reusable Respirator Spares and Accessories

Full Masks



3M™ 7907S Series Full Face Mask

#	Description	Part Number
1	Speaking Diaphragm Kit	7895
2	Breathing Room Assembly	7924
3	Nose Cup Assembly	7991
4	Exhalation Valve Cover	7918
5	Nose Cup Valve Assembly	7882
6	Lens Covers	7992
7	Lens Frame Kit	7928
8	Large Respirator Rubber	7003

3M™ 6000 Series Full Face Mask

#	Description	Part Number
1	Spectacle Kit	6878
2	Lens Cover Peek Off	6885
3	Exhalation Valve	6889
4	Inhalation Valve	6893
5	Inhalation Gasket	6895
6	Head Harness Assembly (including head harness and buckles)	6897
7	Lens Assembly (including lens, bayonet part fittings, inhalation valves and inhalation port gaskets)	6898
8	Neckstrap Assembly	7883
9	Centre Adapter Assembly	6864



Powered & Supplied Air Respirators

Providing clean breathing air is essential when working in areas where hazardous contaminants are present. 3M offers an extensive and flexible range of industrial powered and supplied air respirators, developed especially for the toughest environments.

These respiratory protective systems offer comfortable protection against multiple hazards and their ease-of-use enables improved productivity in the workplace. 3M is available to support the user in the correct selection, training and proper use of these products.

3M™ Powered & Supplied Air Respirators

Powered Air System?

- Incorporates a battery powered motorised fan to draw air through a filter
- Cannot be used to protect against substances with poor warning properties (taste/smell)
- Must not be used in conditions that are Immediately Dangerous to Life or Health (IDLH)
- Suitable for use over long shifts - reduced breathing resistance
- Can offer integrated head, eye and face protection

Supplied Air System?

- Air is supplied from a compressor (compressed air must be of breathable quality)
- Can be used to protect against substances with poor warning properties (taste/smell)
- Must not be used in conditions that are Immediately Dangerous to Life or Health (IDLH)
- Suitable for use over long shifts - reduced breathing resistance
- Can offer integrated head, eye and face protection



Powered Air Respirators



3M™ Versaflo™
Powered Air Turbo TR-300



3M™ Versaflo™
Powered Air Turbo
TR-600



3M™ Jupiter™
Powered Air Turbo



3M™ Powerflow™ Powered
Air System 7900PF



3M™ Airstream™
Respirator AS-300



Supplied Air Respirators



3M™ Versaflo™
Regulators V-Series



3M™ Aircare™
Filtration Units



3M™ S-200+
Supplied Air System

Modular Systems



The modular respirator system is a comprehensive approach to worker protection systems based on comfortable-to-wear modules. All modular headtops, air delivery units and breathing tubes are compatible with one another. Users can mix and match parts as they move from one environment to another, or from one application to the next. It is the ultimate in flexibility for handling changing user environments.

Individual Systems



The individual respirator systems can be used in a variety of workplace applications. They include powered air respirators with integrated head, eye, face and respiratory protection and supplied air regulators with half and full face masks.

Selection Process for Modular Systems

Powered Air Systems

Stage 1A

Select Powered Air Turbo*

Stage 1B

Select Filters, Battery and Belt



Stage 2

Select your Headtop



Stage 3

Select your Breathing Tube



Stage 4

Choose Accessories



* Want an even easier way to select a system? Choose 3M's powered air starter kits, which include everything apart from the headtop.

Supplied Air Systems

Stage 1

Select your Regulator



Stage 2

Select your Headtop



Stage 3

Select your Breathing Tube



Stage 4

Select your Compressed Air Supply Tube



Stage 5

Select Couplings



Stage 6

Choose Accessories



Modular Respirator Systems

3M™ Versaflo™ Headcovers and Hoods S-Series

Integrated Suspension	Reusable Suspension
 <p>S-133 S/L S-333G S/L</p>	 <p>S-433 S/L S-533 S/L S-655 S-657 S-757 S-855E</p>

3M™ Versaflo™ Headtops M-Series

Faceshields	Helmets	Helmets with Shrouds
 <p>M-106 M-107</p>	 <p>M-306 M-307</p>	 <p>M-406 M-407</p>

Breathing Tubes

BT-20 S/L: Lightweight (in two lengths)
BT-30: Self-adjusting
BT-40: Heavy-duty rubber



BT-20 S/L



BT-30*



BT-40

* BT-30 not approved for use with M-400 Headtop/TR-600 Powered Air Turbo combinations. BT-20S/L or BT-40 Breathing Tube should be used.

Powered Air Turbos

Particulate only (nuisance level organic vapour and acid gas options available)



3M™ Versaflo™
Powered Air Turbo TR-300

Particulate + Gas & Vapour



3M™ Versaflo™
Powered Air Turbo TR-600

Particulate + Gas & Vapour



3M™ Jupiter™ Powered Air Turbo

Intrinsically Safe
Particulate + Gas & Vapour



3M™ Jupiter™ Powered Air Turbo
with IS Kit



Filter

- Spark Arrestor
- Prefilter
- P Filter
- P/Nuisance Level Organic Filter
- P/Nuisance Level Acid Gas (HF up to 10 x Threshold Limit Value)

Battery

- Standard battery
- High capacity battery

Charger

- Single Station Battery Charger
- 4-Station Battery Charger Kit



Filter

- Spark Arrestor
- Prefilter
- P Filter
- P/Nuisance Level Organic Vapour/Acid Gas
- A1P Filter
- A2P Filter
- ABE1P Filter
- ABE2K1HgP Filter

Battery

- Standard Battery
- High Capacity Battery

Charger

- Single Station Bat. Charger
- 4-Station Bat. Charger Kit



Filter

- Prefilter Pads
- Particulate P Filters
- A2P Filters
- A2BEK1P Filters
- ABE1P Filters

Battery

- 4 hour Battery
- 8 hour Battery
- 4 hour IS Battery

Charger

- Single Station Battery Charger
- 10-station Multi Battery Charger

Welding Shields, High Temperature Helmet and Welding Helmets

Welding Shields



HT-622
HT-629
HT-639

Individual Respirator Systems

Belt-Mounted Powered Air Respirator System for Asbestos Environments



3M™ Versaflo™ Powered Air System TR-603E-ASB with 7900PF Full Face Mask and BT-50 Breathing Tube

Face-Mounted Powered Air Respirator



3M™ Powerflow™ Powered Air System 7900PF

Supplied Air Respirator



3M™ S-200+ Supplied Air System

Helmet-Mounted Powered Air Respirator



3M™ Airstream™Helmet AS-300



BT-922

Breathing Tube Accessories

BT-922: Disposable Cover
BT-926: Flame-resistant Cover

Supplied Air Regulators

Air Cooling



3M™ Versaflo™ Supplied Air Unit V-100E

Air Heating



3M™ Versaflo™ Supplied Air Unit V-200E

Flow Controlled



3M™ Versaflo™ Supplied Air Regulator V-500E

Belt unit coupling



Air Supply Tube



Air supply tube coupling set



3M™ Aircare™ Filtration Units (Wall Mounted or Freestanding)

Welding Headtops



* For welding applications please refer to the Speedglas pages of this catalogue pages 138-150.



3M™ Versaflo™ Powered Air Turbo TR-600

The new 3M Versaflo Powered Air Respirator System TR-600 provides protection against particles, gases or vapours, or against a combination of these depending on the type of filter used.

The turbo has selectable multiple airflows through a simple, intuitive, easy to use two-button operation and the particulate filter and battery status indicators provide constant updates during use. The modern, low profile design keeps weight close to the back resulting in greater comfort.

Features and Benefits:

Comfortable Airflow

- Three user selectable flow rates to maximise comfort
- Controlled airflow delivers steady flow as battery discharges or filter loads with particulates

Ease of Use

- TR-600 display shows battery charge status and particulate filter loading status during use
- Charge status is also indicated by a useful LED display on the battery
- No user calibration of turbo required
- Electronic audible, visual and vibratory alarm in case of low battery and/or low air flow

Multiple Applications

- Easy clean belt – submersible belt with smooth surfaces allows easy, thorough cleaning
- High durability belt option for hot work or rugged environments provides greater durability and spark/flame resistance
- Suitable for shower decontamination and temporary submersion to aid cleaning
- For asbestos specific version, please see Individual Respirator Systems - TR-603E-ASB (page 68)

Safety

- Approved to EN 12941 Class TH2 or TH3 dependent on headtop

Filter	Filter Covers
TR-6710E P	TR-6700FC
TR-6820E P + Nuisance Odour* Organic Vapour Filter and Acid Gas (Hydrogen Fluoride up to 10 x Threshold Limit Value)	TR-6800FC
TR-6110E A1P TR-6130E ABE1P	TR-6100FC
TR-6310E A2P	TR-6300FC
TR-6580E ABE2K1HgP	TR-6500FC

* "Nuisance Odour" refers to concentrations below the threshold limit value (TLV)



Typical Applications

- Pharmaceutical manufacturing
- Painting
- Chemical processing
- Agriculture
- Demolition
- Pulp and paper processing
- Medical & healthcare
- Foundries

3M™ Versaflo™ Powered Air Turbo TR-602E

This turbo can be easily adapted to your type of environment - see options below. (Includes Air Flow Indicator TR-971 and Spark Arrestor TR-662 x2).



3M™ Versaflo™ Powered Air Turbo Starter Kit TR-619E

This Versaflo™ Starter Kit includes the TR-602E Turbo, P filter, filter cover, prefilters (x10), spark arrestors (x2), easy clean belt, high capacity battery, single station battery charger kit, BT-30 length adjusting breathing tube and airflow indicator.



Batteries

TR-630 Standard Battery TR-632 High Capacity Battery

Belts

TR-626 High Durability Belt TR-627 Easy Clean Belt

Spares & Accessories

TR-6600 Pre-filter TR-971 Air Flow Indicator
 TR-662 Spark Arrestor BPK-01 Backpack
 TR-653 Cleaning & Storage Kit TR-655 Backpack Adapter
 TR-651 Filter Latch Assembly TR-329 Braces

Chargers

TR-641E Single Station Battery Charger Kit
 TR-644E 4-Station Battery Charger Kit





3M™ Versaflo™ Powered Air Turbo TR-300

The 3M™ Versaflo™ Powered Respirator System TR-300 combines performance, protection and functionality with modern, stylish design and comfort. It is the key to easy-to-use, versatile, respiratory protection systems for particulate environments.

Features and Benefits:

Ease of Use

- Electronic audible and visual alarm in case of low battery and/or low air flow
- Intelligent Lithium ion battery quickly charges and doesn't suffer from memory effect
- Charge status is indicated by a useful LED display



Comfort

- Light and small - extremely slim, lightweight, balanced design for comfort

Multiple Applications

- High efficiency filter captures hazardous dust, mist and fume plus options for nuisance level gases and vapours
- IP53 rating. Suitable for use in decontamination shower

Safety

- Approved to EN 12941, TH2 or TH3 depending on headtop



Filter

- TR-3712E P
- TR-3802E P + Nuisance Level* Organic Vapour
- TR-3822E P + Nuisance Level* Acid Gas Filter (Hydrogen Fluoride up to 10 x Threshold Limit Value)

* Nuisance level refers to concentrations below the threshold limit value (TLV)

Batteries

- TR-330 Standard Battery
- TR-332 High Capacity Battery

Belts

- TR-325 Standard Belt
- TR-327 Easy-Clean Belt
- TR-326 Leather Belt

Spares & Accessories

- TR-3600 Pre-filter
- TR-970 Air Flow Indicator
- BPK-01 Backpack
- TR-362 Spark Arrestor
- TR-329 Braces
- TR-380 Filter Surround Gasket

Chargers

- TR-341E Single Station Battery Charger Kit
- TR-344E 4-Station Battery Charger Kit

Typical Applications

- Pharmaceutical manufacturing
- Food & beverage
- Woodworking
- Metal working
- Surface preparation
- Smelting



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3M™ Versaflo™ Powered Air Turbo TR-302E

This unit comes with an airflow indicator only. To adapt to your type of environment see options below.

3M™ Versaflo™ Starter Kit TR-315E

This Versaflo Starter Kit includes the TR-302E Turbo, particulate filter, pre-filter, spark arrestor, standard belt, high capacity battery pack, battery charger kit, self-adjusting breathing tube and airflow indicator.



Now choose your headtop from pages 58-63.





3M™ Jupiter™ Powered Air Turbo

Fully compatible with all 3M™ Versaflo™ Headtops and Breathing Tubes, the 3M Jupiter Respirator provides respiratory protection against particulate and gaseous contaminants (particulate only and combined particulate/gas and vapour filters are available). It can also be used in potentially explosive atmospheres when fitted with the intrinsically safe pouch and battery (available as the Intrinsically Safe Kit).

Ergonomically designed to sit at the base of the user's back, the unit's low weight is carried mostly on the user's hips via the padded comfort belt. As a result, the 3M Jupiter Respirator is comfortable enough to wear for entire work shifts.

Features and Benefits:

Ease of Use

- Electronic audible and visual alarm in case of low battery and/or low air flow

Comfort

- Modern, ergonomic design
- High comfort decontamination belt

Multiple Applications

- IP53 rating. Suitable for shower decontamination
- "Intrinsically Safe" (IS) Kit is available for use in potentially explosive atmospheres. Kit includes pouch and Intrinsically Safe battery

Safety

- Approved to EN 12941 class TH2 or TH3 depending on headtop



Typical Applications

- Pharmaceutical manufacturing
- Demolition
- Painting
- Pulp and paper processing
- Chemical processing
- Medical & healthcare
- Agriculture
- Foundries

3M™ Jupiter™ Turbo (085-00-10P)

Includes decontamination belt, air flow indicator and calibration tube.

To adapt to your type of environment see options below.

3M™ Jupiter™

Powered Air Starter Kit

This Starter Kit includes a standard Jupiter Turbo with decontamination belt and clip, air flow indicator and calibration tube as well as a pair of organic vapour and particulate (A2P) filters, pre-filters, self-adjusting breathing tube, 8 hour rechargeable battery (NiMH) and battery charger.



Now choose your headtop from pages 58-63.



Filter

Pre-filter Pack	461-00-02P24X5
P Filter	450-00-25P2X12
A2P Filter	453-00-25P2X6
ABE1P Filter	456-18-25P2X6
A2BEK1P Filter	453-09-25P2X6

Batteries

Battery Pack - 8 hour	007-00-64P
Battery Pack - 4 hour	007-00-63P
Battery Pack - 4 hour IS battery (provided as part of IS Kit with pouch).	085-12-00P

Chargers

Intelligent Charger	CHG-02E
10 Station Intelligent Charger	003-00-59P



3M™ Versaflo™ Supplied Air System V-Series

The modular range of supplied air respirators lets you choose how you want your system built, with the flexibility to change it in the future. The 3M™ Versaflo™ Supplied Air Regulators offer protection against dust, mist, fumes, gases or vapours and combination hazards e.g. paint spray. Supplied Air Regulators do not offer protection in confined spaces, oxygen deficient atmospheres or for asbestos stripping.

Features and Benefits:

Comfort

- Individually adjustable, consistently controlled airflow
- Air flow 170-305 l/min
- Removable, integrated activated charcoal filter
- Integrated silencer
- Belt swivel mechanism

Multiple Applications

- Spray gun or compressed air-tool port

Safety

- Low-pressure warning whistle
- Double action supplied air connection
- Approved to EN 14594 Class 2A/3A or 2B/3B dependent on headtop



Typical Applications

- Surface preparation, painting and coating
- Agriculture
- Woodworking
- Metalworking

3M™ Versaflo™ Supplied Air Regulator V-500E

Balanced regulator specifically designed for respirator use, the Versaflo V-500E Regulator ensures smooth airflow, safety and comfort.

3M™ Versaflo™ Cooling Regulator V-100E and 3M™ Versaflo™ Heating Regulator V-200E

3M™ Versaflo™ Regulators V-100E and V-200E allow users to either cool (V-100E) or heat (V-200E) the air by as much as 28°C, making them a good choice for workers exposed to uncomfortably hot or cold temperatures.



Now choose your headtop from pages 58-63.



Filtration Units and Couplings

The 3M™ Aircare™ Filtration Unit can be connected inline to clean the compressed air before it is fed to the regulator.

The various components of the Versaflo V-Series Regulators are connected using plug and socket hose couplings (Rectus 25 or Rectus 95 connectors available).

Further details on page 65-66.





3M™ Versaflo™ Integrated Suspension Headcovers & Hoods S-Series

Based on a computer modeling of a worldwide sampling of head sizes, the 3M™ Versaflo™ Headcovers and Hoods S-Series, through their sizing and adjustment options, will comfortably fit many users. The integrated suspension headcovers and hoods can be suitable for applications that require frequent replacement of the entire headtop assembly, such as pharmaceutical manufacturing, or in situations where there is less soiling of the outer fabric. For disposal, the suspension assembly and air inlet components can be quickly removed and separated for segregated waste streams, where facilities are available.

Typical Applications

- Surface preparation, painting and coating
- Pharmaceutical manufacturing
- Chemical industry
- Medical and healthcare
- Food and beverage
- Agriculture
- Woodworking
- Pulp and paper processing

Features and Benefits:

All-Day Comfort

- Slim design, that closely profiles the user's head for improved appearance
- Lightweight and loose-fitting
- Excellent airflow distribution for improved comfort, lower noise and reduced fogging

Integrated Suspension

- Ready to use straight out of the box
- Available in two adjustable sizes: S/M (50-58 cm) and M/L (54-64 cm)

Improved Visibility

- Excellent field of view, particularly downwards, with reduced curvature for decreased reflections and glare

Added Protection

- Comfortably worn with prescription eyewear, safety glasses, and some limited facial hair
- Meets the highest respiratory performance requirements (TH3) for this type of product when used with 3M™ Air Delivery Unit
- Eye and face protection to EN166 – liquid splash and low energy impact
- Coverage of head, hair, neck and shoulders



3M™ Versaflo™ Hood S-533

Neck and shoulder coverage with soft, low-linting fabric that more readily drapes over user.

Fabric material: Polyurethane coated knitted polyamide.

Visor material: Coated polycarbonate for increased chemical and scratch resistance.



3M™ Versaflo™ Headcover S-133

General purpose, cost-effective fabric.

Fabric material: 2-layer polypropylene spunbond/laminated film.

Visor material: PETG.



3M™ Versaflo™ Headcover S-333G

Soft, quiet, more durable low-linting fabric.

Fabric material: Polyurethane coated knitted polyamide.

Visor material: Coated polycarbonate for increased chemical and scratch resistance.



3M™ Versaflo™ Hood S-433

Includes neck and shoulder coverage.

Fabric material: 2-layer polypropylene spunbond/laminated film.

Visor material: PETG.

3M Air Delivery Unit S-Series Headcovers and Hoods

	Classification	NPF ¹
3M™ Versaflo™ TR-300	EN12941 TH3	500
3M™ Versaflo™ TR-600	EN12941 TH3	500
3M™ Jupiter™	EN12941 TH3	500
3M™ Versaflo™ V-100E/V-200E/V-500E	EN14594 3A ²	200

Additional Protection

Eye Protection EN166 2:F:3

1 Nominal Protection Factor (NPF) - a number derived from the maximum percentage of total inward leakage permitted in relevant European Standards for a given class of respiratory protective devices.

2 S-Series Headcovers and Hoods meet the lower strength (A) requirements of EN14594. They are approved for use with a range of compressed air supply tubes that meet both the lower and higher strength (A and B) requirements.



3M™ Versaflo™ Premium Hoods with Reusable Suspensions S-Series

Premium reusable suspension hoods can be a highly cost-effective choice for some high disposal rate environments: just the soiled hood fabric is replaced, while the suspension and air ducting can be reused. It also has an externally-adjustable airflow control that allows wearers to modify the airflow distribution to suit personal comfort needs. With a simple turn of the external controller, wearers can shift the location of air flowing over the back of their head to over their temples, face and visor.

Features and Benefits:

Comfort

- Slim design, that closely profiles the user's head for improved appearance
- Lightweight and loose-fitting
- Excellent airflow distribution for improved comfort, lower noise and reduced fogging

Reusable Suspension

- Cost effective choice for some high disposal rate environments
- User control of airflow location and suspension adjustments for best comfort and custom fit
- One Size: 50-64 cm

Improved Visibility

- Excellent field of view, particularly downwards, with reduced curvature for decreased reflections and glare

Added Protection

- Comfortably worn with prescription eyewear, safety glasses, and some limited facial hair
- Meets the highest respiratory performance requirements (TH3) for this type of product when used with 3M™ Air Delivery Units
- Eye and face protection EN166 – liquid splash and low energy impact



3M Air Delivery Unit	S-Series Headcovers and Hoods Classification	Additional Protection	NPF ¹
3M™ Versaflo™ TR-300	EN12941 TH3	Eye Protection EN166 2:F:3	500
3M™ Versaflo™ TR-600	EN12941 TH3		500
3M™ Jupiter™	EN12941 TH3		500
3M™ Versaflo™ V-100E/V-200E/V-500E	EN14594 3A ²		200

1 Nominal Protection Factor (NPF) - a number derived from the maximum percentage of total inward leakage permitted in relevant European Standards for a given class of respiratory protective devices.
 2 S-Series Headcovers and Hoods meet the lower strength (A) requirements of EN14594. They are approved for use with a range of compressed air supply tubes that meet both the lower and higher strength (A and B) requirements.

Typical Applications

- Surface preparation, painting and coating
- Pharmaceutical manufacturing
- Chemical industry
- Medical and healthcare
- Food and beverage
- Agriculture
- Woodworking
- Pulp and paper processing



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3M™ Versaflo™ Hood S-655

General purpose, with knitted inner collar that is shorter and thinner than previous models.

Fabric material: 2-layer polypropylene spunbond/laminated film.

Visor material: PETG.



3M™ Versaflo™ Hood S-657

Features a double-shroud design for its respiratory seal. The inner shroud can be tucked into a shirt or protective coverall, which allows excess air to be channeled over the body, providing additional comfort.

Fabric material: 2-layer polypropylene spunbond/laminated film.

Visor material: PETG.



3M™ Versaflo™ Painters Hood S-757

Fabric specifically intended to help capture paint overspray. Double shroud design.

Fabric material: 3-layer polypropylene spunbond/laminated film/spunbond.

Visor material: Coated polycarbonate.



3M™ Versaflo™ Hood S-855E

Sealed seam hood for liquid chemical splash environments. Knitted inner collar design.

Fabric material: Spunbond polypropylene with multilayer barrier film.

Visor material: Coated polycarbonate.



3M™ Versaflo™ Faceshields M-100 Series

The 3M™ Versaflo™ Headtops M-100 Series feature lightweight, compact and well-balanced faceshields that can offer integrated protection from a range of respiratory, eye, face and hearing hazards.

Features and Benefits:

Highly Versatile Rigid Headtops

- Provides protection from specific respiratory, head and eye hazards

Modern, Well Balanced Design

- Lightweight with excellent balance
- Fully-adjustable head suspension
- A deflector allows users to direct the airflow inside the headtop for increased control and comfort

Visor Design

- Visor design combines excellent peripheral and downward vision with good optical clarity
- Lenses provide chemical and scratch resistance

Easy To Maintain

- Optional hearing protection 3M™ PELTOR™ Helmet-Mounted Earmuff Assembly
- Many parts are common to all Versaflo M-Series Headtops, meaning reduced inventories and downtime
- Spare parts and accessories are quick, easy and intuitive to replace



Typical Applications

- Woodworking
- Painting
- Surface treatment
- Agricultural applications
- Grinding
- Polishing



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3M™ Versaflo™ Faceshield M-106

Features a general purpose faceseal for dusts, spraying and chemical processing.

Fabric material: Polyurethane coated polyamide.

3M™ Versaflo™ Faceshield M-107

Features a flame resistant faceseal for applications with hot particles.

Fabric material: Flame resistant polyester.

Accessories

M-925 Uncoated Visor - providing additional molten metal splash protection

M-927 Coated Visor - providing chemical and scratch resistance

M-928 Peel-Off Visor Covers (pack of 10)

M-935 Standard faceseal (white) (pack of 5)

M-936 Comfort faceseal (pack of 5)

M-937 Flame resistant faceseal (pack of 5)

M-958 Chin-strap

3M™ PELTOR™ Hearing Protector Helmet Attachments: H31P3AF-300, H510P3AF-405-GU (Optime I), H520P3AF-410-GQ (Optime II) and H540P3AF-413-SV (Optime III)

M-972 Flame Resistant Headtop Cover

M-976 Head, Neck and Shoulder Cover

3M Air Delivery Unit	Versaflo™ M-100	
	Classification	NPF ¹
3M™ Versaflo™ TR-300	EN12941 TH2	50
3M™ Versaflo™ TR-600	EN12941 TH2	50
3M™ Jupiter™	EN12941 TH2	50
3M™ Versaflo™ V-100E/ V-200E/V-500E	EN14594 2B ²	50

Additional Protection

Eye Protection EN166 1:BT:3*
EN166 1:BT:3:9**

Hearing Protection EN352-3***

Head Protection N/A

* With M-927 Coated Visor
** With M-925 Uncoated Visor
*** With 3M™ Peltor H31 P3AF 300 (SNR = 28; Size designation M/L) or Optime I (SNR = 26; Size designation M/L), Optime II (SNR = 30; Size designation M/L) or Optime III (SNR = 34; Size designation M/L). Contact 3M for full attenuation data including octave band and H, M and L values.

1 Nominal Protection Factor – a number derived from the maximum percentage of total inward leakage permitted in relevant European Standards for a given class of respiratory protective devices.

2 The M-Series Faceshields and Helmets meet the higher strength (B) requirements of EN14594. They are approved for use with a range of compressed air supply tubes that meet both the lower and higher strength (A and B) requirements.





3M™ Versaflo™ Helmets M-300 Series

The 3M™ Versaflo™ Helmets M-300 Series feature lightweight, compact and well-balanced helmets that can offer integrated protection from a range of respiratory, head, eye, face and hearing hazards. M-300 Series helmets meet the highest respirator performance requirements (TH3) for this type of product when used with specific 3M™ Air Delivery Units.

Features and Benefits:

Highly Versatile Rigid Headtops

- Head protection approved according to EN397
- Integrated protection from multiple hazards (e.g. respiratory, impact, splash hazards)

Modern, Well Balanced Design

- Lightweight with excellent balance
- Fully-adjustable head suspension
- A deflector allows users to direct the airflow inside the headtop for increased control and comfort

Visor Design

- Visor design combines excellent peripheral and downward vision with good optical clarity
- Lenses provide chemical and scratch resistance

Easy To Maintain

- Optional hearing protection 3M™ PELTOR™ Helmet-Mounted Earmuff Assembly
- Many parts are common to all Versaflo M-Series Headtops, meaning reduced inventories and downtime
- Spare parts and accessories are quick, easy and intuitive to replace



3M Air Delivery Unit	Versaflo™ M-300	
	Classification	NPF ¹
3M™ Versaflo™ TR-300	EN12941 TH3	500
3M™ Versaflo™ TR-600	EN12941 TH3	500
3M™ Jupiter™	EN12941 TH2	50
3M™ Versaflo™ V-100E/ V-200E/V-500E	EN14594 3B ²	200

¹ Nominal Protection Factor – a number derived from the maximum percentage of total inward leakage permitted in relevant European Standards for a given class of respiratory protective devices.

² The M-Series Faceshields and Helmets meet the higher strength (B) requirements of EN14594. They are approved for use with a range of compressed air supply tubes that meet both the lower and higher strength (A and B) requirements.

Additional Protection

Eye Protection EN166 1:BT:3*
EN166 1:BT:3:9**

Hearing Protection EN352-3***

Head Protection EN397 LD 440V a.c.

* With M-927 Coated Visor
 ** With M-925 Uncoated Visor
 *** With 3M™ Peltor H31 P3AF 300 (SNR = 28; Size designation M/L) or Optime I (SNR = 26; Size designation M/L), Optime II (SNR = 30; Size designation M/L) or Optime III (SNR = 34; Size designation M/L). Contact 3M for full attenuation data including octave band and H, M and L values.

Typical Applications

- Smelting and foundry applications
- Grinding
- Chemical processing and plant maintenance
- Agricultural applications
- Construction and renovation
- Demolition



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3M™ Versaflo™ Helmet M-306

Features a general purpose faceseal for construction, chemical applications and heavy industry.

Fabric material: Polyurethane coated polyamide.

3M™ Versaflo™ Helmet M-307

Features a flame resistant faceseal for applications with hot particles.

Fabric material: Flame resistant polyester.

Accessories

M-925 Visor - providing additional molten metal splash protection

M-927 Coated Visor - providing chemical and scratch resistance

M-928 Peel-Off Visor Covers (pack of 10)

M-935 Standard faceseal (white) (pack of 5)

M-936 Comfort faceseal (pack of 5)

M-937 Flame resistant faceseal (pack of 5)

M-958 Chin-strap

3M™ PELTOR™ Hearing Protector Helmet Attachments: H31P3AF 300, H510P3AF-405-GU (Optime I), H520P3AF-410-GQ (Optime II) and H540P3AF-413-SV (Optime III)

M-972 Flame Resistant Headtop Cover

M-976 Head, Neck and Shoulder Cover



3M™ Versaflo™ Helmets with Shrouds M-400 Series

The 3M™ Versaflo™ M-Series Helmets can offer integrated protection from a range of respiratory, head, eye, face and hearing hazards with additional neck and shoulder coverage. M-400 Series helmets meet the highest respirator performance requirements (TH3) for this type of product when used with specific 3M™ Air Delivery Units.

Features and Benefits:

Highly Versatile Rigid Headtops

- Head protection approved according to EN397
- Integrated protection from multiple hazards (e.g. respiratory, impact, splash hazards)

Modern, Well Balanced Design

- Lightweight with excellent balance
- Fully-adjustable head suspension
- A deflector allows users to direct the airflow inside the headtop for increased control and comfort

Visor Design

- Visor design combines excellent peripheral and downward vision with good optical clarity
- Lenses provide chemical and scratch resistance

Easy To Maintain

- Many parts are common to all Versaflo M-Series Headtops, meaning reduced inventories and downtime
- Spare parts and accessories are quick, easy and intuitive to replace



Typical Applications

- Smelting & foundry applications
- Grinding
- Construction & renovation
- Demolition



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3M™ Versaflo™ Helmet M-406

Features a highly durable shroud for construction applications and heavy industry.

Fabric material: Nylon.

3M™ Versaflo™ Helmet M-407

Features a flame resistant shroud for applications with hot particles.

Fabric material: Polyaramid.

Accessories

M-925 Visor - providing additional molten metal splash protection

M-927 Coated Visor - providing chemical and scratch resistance

M-928 Peel-Off Visor Covers (pack of 10)

M-958 Chin-strap

M-447 Flame resistant shroud

M-448 High durability shroud

M-972 Flame resistant headtop cover



3M Air Delivery Unit	Versaflo™ M-400		Additional Protection
	Classification	NPF ¹	
3M™ Versaflo™ TR-300	EN12941 TH3	500	Eye Protection EN166 1:BT:3* EN166 1:BT:3:9**
3M™ Versaflo™ TR-600	EN12941 TH3	500	Hearing Protection N/A
3M™ Jupiter™	EN12941 TH3	500	Head Protection EN397 LD 440V a.c.
3M™ Versaflo™ V-100E/ V-200E/V-500E	EN14594 3B ²	200	* With M-927 Coated Visor ** With M-925 Uncoated Visor

¹ Nominal Protection Factor – a number derived from the maximum percentage of total inward leakage permitted in relevant European Standards for a given class of respiratory protective devices.

² The M-Series Faceshields and Helmets meet the higher strength (B) requirements of EN14594. They are approved for use with a range of compressed air supply tubes that meet both the lower and higher strength (A and B) requirements.



3M™ Welding Shields HT-600 Series

The HT-600 Series Welding Shields not only offer respiratory protection but also face, eye and impact protection in metal working and fabrication environments. The various flip-up shield and filter mechanisms allow you to inspect your work whilst the large coverage area gives protection from radiation and sparks. The range also offers a choice of filter shades including auto-darkening and fixed shades. Thanks to the comfortable head harness and knitted face seal, the welder can wear the welding shield for long periods of time. The airflow through the visor ensures reduced sweat build up and can make the welder more comfortable and efficient.

Typical Applications

- Metal working

For a more comprehensive guide to welding protection, please refer to the welding section 138-150.

Features and Benefits:

- Superb coverage
- Respiratory, eye, face and impact protection
- Lifiable welding lenses to allow clear view, while retaining respiratory protection
- New airduct system giving improved airflow to the face area
- New comfortable easyadjust harness with double comfort band
- Harness/airduct in one robust assembly
- Easy-to-fit comfortable, elasticated, knitted face seal



3M Air Delivery Unit	S-Series Headcovers and Hoods	Additional Protection
	Classification	NPF ¹
3M™ Versaflo™ TR-300	EN12941 TH2	50
3M™ Versaflo™ TR-600	EN12941 TH2	50
3M™ Jupiter™	EN12941 TH2	50
3M™ Versaflo™ V-100E/ V-200E/V-500E	EN14594 2A ²	50

1 Nominal Protection Factor - a number derived from the maximum percentage of total inward leakage permitted in relevant European Standards for a given class of respiratory protective devices.

2 The HT-600 Series Welding Shields meet the lower strength (A) requirements of EN14594. They are approved for use with a range of compressed air supply tubes that meet both the lower and higher strength (A and B) requirements.

3M™ Welding Shield HT-639

A well balanced shield for welders.

Headtop weight: 696g.

- Supplied with a 90×110mm filter holder
- Conventional or auto-darkening filters can be fitted



3M™ Welding Shield HT-622

A super-light shield for welders. Wide range of filter shade combinations available.

Headtop weight: 595g.

- Supplied with shade 1.7 UV filter, also available in shades 3 & 5
- Supplied with shade 8 welding filter, also available in shades 5 & 10
- Total shade range available from 6.7 to 15



3M™ Welding Visor HT-629

The solution for those welders needing a welding shield with a clear, wide view visor beneath. The 90 × 110mm filter holder hinges down for easy access.

Headtop weight: 794g

- Supplied without a welding filter, but with cover lenses
- Conventional or auto-darkening filters can be fitted



3M™ Versaflo™ Breathing Tubes BT-Series

A breathing tube connecting the air source with the headtop is required to ensure that clean air reaches the headtop reliably and with unrestricted airflow. The breathing tubes offered are compatible with all 3M™ Versaflo™ Headtops and Air Delivery Units*.

Features and Benefits:

- QRS (Quick Release Swivel) breathing tubes allow fast and easy connection**
- All BT-Series Breathing Tubes meet the higher respiratory performance requirements with 3M™ headtops
- A special flame-resistant sleeve lengthens the life of the breathing tube and protects it from flying sparks
- A disposable breathing tube cover is available to help aid, cleaning and decontamination

** BT-50 Breathing Tube has a DIN Connection



3M™ Versaflo™ Breathing Tube BT-20 S/L
Lightweight breathing tube that comes in two lengths and is easy to wipe down.
Material: Polyurethane.
Length: 735mm (S), 965mm (L).



3M™ Versaflo™ Breathing Tube BT-30
Self-adjusting length for improved fit for many wearers and reduce risk of catching and snagging.
Material: Polyurethane.
Length: 525 - 850mm.



3M™ Versaflo™ Breathing Tube BT-40
High durability breathing tube.
Material: Neoprene.
Length: 840mm.



Accessories

BT-922: Disposable breathing tube cover

BT-926: Flame resistant breathing tube cover



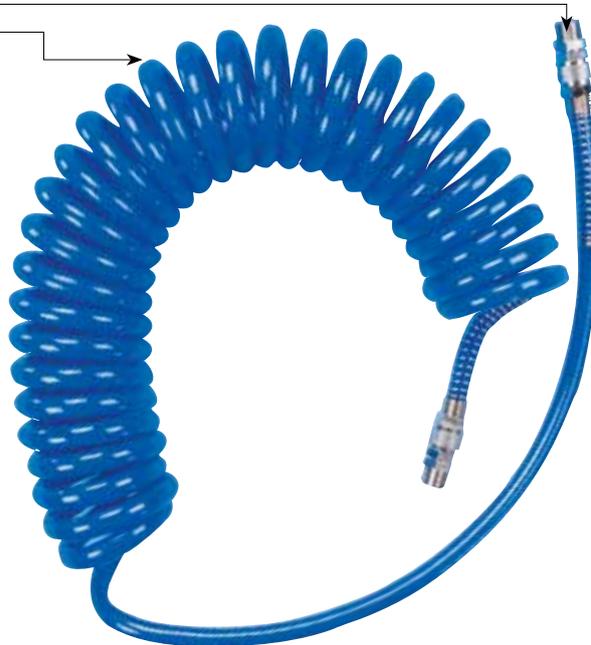
3M™ Compressed Air Supply Tubes and Couplings

Various compressed air supply tubes are available to connect the 3M™ Air Regulator to the facility's compressed air system to meet different requirements.

The tubes are available in different lengths and they guarantee high quality connections to all components. The tubes have a 3/8" male pipe thread BSP at each end to allow flexibility in the choice of coupling systems.

Features and Benefits:

- 3/8" BSP connection
- Flexibility of the hose



7.5 m
Coiled Air Hose
Output 3/8" (both ends).
Part no. 308-00-40P.

10m
Standard duty hose
Output 3/8" (both ends).
Part no. 308-00-30P.

10m
Standard duty
Antistatic, high temperature tube.
Output 3/8" (both ends).
Part no. 308-00-72P.

30m
Standard duty hose
Output 3/8" (both ends).
Part no. 308-00-31P.

Coupling Set 3/8" BSP
Rectus 25
Part no. 530-12-82P3.
Rectus 95
Part no. 530-12-81P3.



2-Way Branch Set
3/8" female pipe thread BSP,
incl. 3/8" BSP adapters
Part no. 312-03-01P3.



3-Way Branch Set
3/8" BSP,
incl. 3/8" BSP adapters
Part no. 312-03-00P3.



Coupling Plug
1/4" BSP,
Rectus 25
Part no. 530-12-52P3.
Rectus 95
Part no. 530-12-53P3.



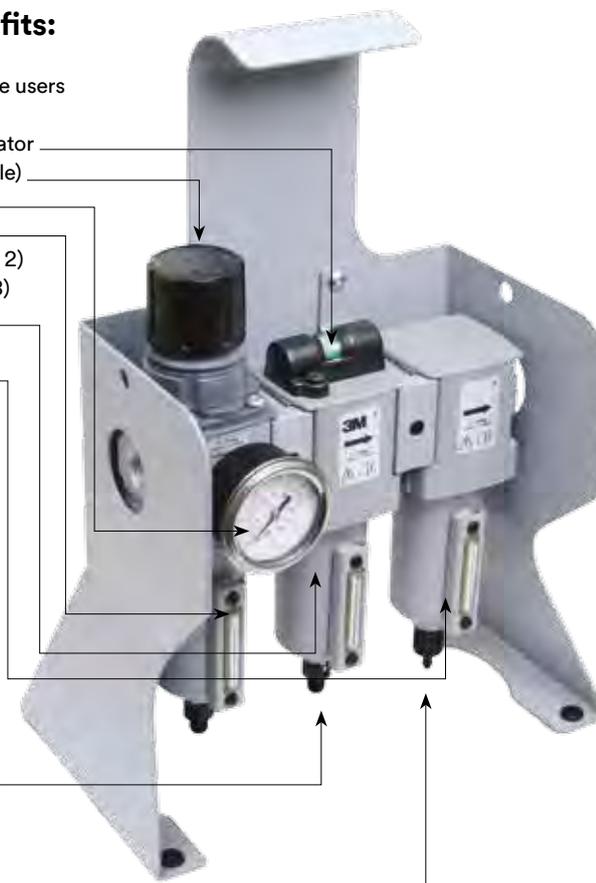
3M™ Aircare™ Filtration Units

The 3M™ Aircare™ Filtration Units can be combined with all 3M™ Supplied Air Respirator Systems. The three-stage filtration system supplies highest quality air to the Supplied Air Respirator System and compressed air tools by removing water and oil aerosols, particles and odours from the facility-supplied compressed air.

The Filtration Unit is available as either a portable freestanding unit or wall-mounted unit.

Features and Benefits:

- Can be used for up to three users (or two users plus air tool)
- Differential Pressure Indicator
- Pressure regulator (lockable)
- Pressure gauge
- Pre-filter
- Semi Auto Drains (Stage 1, 2) and Manual Drain (Stage 3)
- Coalescing filter
- Adsorber filter with activated charcoal



Adapters and connectors

- Input: 1/2" or 3/8" female pipe thread BSP
- Includes 3/8" to 1/2" BSP adapter
- Includes 2 adapters, 3/8" BSP to 3/8" male pipe thread BSP
- Output: 3/8" BSP
- Output pressure can be adjusted with the integrated pressure regulator. The Aircare™ Filtration Units can be used with input pressures up to 10 bar

3M™ Aircare™ Filtration Unit, Freestanding ACU-04

Input: 1/2" or 3/8" female pipe thread BSP.
Output: 3/8" BSP.

Wall-mounted option:

3M™ Aircare™ Filtration Unit, Wall Mounted ACU-03

Input: 1/2" or 3/8" female pipe thread BSP.
Output: 3/8" BSP.





3M™ S-200+ Supplied Air System

NEW

The 3M™ Supplied Air Respirator System S-200+ is a comfortable and versatile supplied air respirator system for use with the 3M™ 6000 and 3M™ 7000 Series Half and Full Face Masks. The S-200+ System by 3M can be used as a standard airline respirator system or in dual-mode with filter back-up when air supply is disconnected.

Engineered to deliver additional comfort and security, the S-200+ features double-action safety couplings to help minimise the risk of accidental disconnection during use and an adjustable airflow feature so you can control the air across your face for maximum comfort.

Features and Benefits:

Cool and Comfortable

- Lightweight and balanced system with a constant flow of air across the face for a cooler and more comfortable wear

Adjustable Airflow

- Lockable airflow adjustment knob giving you full control of a range of input pressure

NEW! Double Action Couplings

- Help to minimise the risk of accidental disconnection during use giving you enhanced confidence in protection
- Stainless Steel CAST Connection, offering improved corrosion resistance in tough conditions

NEW! ATEX Tested

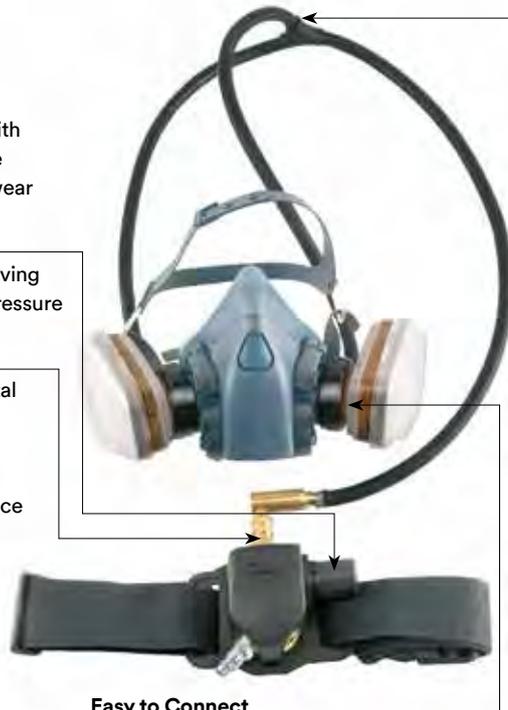
- Assessed in accordance with the requirements of the ATEX directive and in accordance with EN13463-1 for non-electrical equipment.*
- Suitable for use in IIB 2GD environments under certain conditions. Please see all relevant user information for further details.

Top Performance

- Tested and approved to EN14594:2005
- Meets the highest level of protection, Class 4B for continuous flow supplied air respirators when fitted to a full face mask

Quick and Easy Maintenance

- Easy to maintain, spare parts are quick, easy and intuitive to replace



Easy to Connect

- Robust, proven bayonet connection to the facepiece and filter provides easy fitting with confidence of security

Easy Movement

- Low profile, narrow-bore breathing tube for ease of movement and helps to reduce interference with your work



Typical Applications

- Spray Painting
- Glass Fibre Fabrication
- Powder Coating
- Material Handling
- General Transport
- Boat building
- Metal Fabrication
- Pharmaceutical
- Oil and Gas
- Automotive & Aerospace

3M™ S-200+ Supplied Air System

Approvals: EN14594

NPF: 3M Half Face Masks (Class 3A/B) = 200
3M Full Face Masks (Class 4A/B) = 2000

Pressure range: 3.0 – 7.0 Bar

Pressure range (with Auxiliary air tool connected): 4.5-7.0 Bar

Maximum Pressure: 10 Bar

Select Your Individual Respirator System:

1. Choose the S-200+ Air Delivery Unit
2. Choose your half face or full face mask
3. Choose your filters (for use in dual-mode)
4. Choose the appropriate air supply tube
5. Choose your accessories and air tools (optional)



NEW! Flow Check Bag FCB-01

The S-200+ includes a Flow Check Bag allowing you to conduct a simple pre-use check to ensure that the correct amount of air is being delivered - giving you peace of mind

* When used with a 3M™ recommended Full Face mask the product meets the requirements for a class 4A/B device. When used with a 3M™ recommended Half Face mask the product meets the requirements for a class 3A/B device.



COMING SOON

NEW 3M™ Versaflo™ Powered Air Turbo TR-603E-ASB for Asbestos Environment

The 3M™ Versaflo™ Powered Air Respirator System TR-603E-ASB is a belt-mounted air purifying device specifically designed for use in the asbestos/abatement environment.

When combined with 3M 7900PF Full Face Mask and BT-50 Breathing Tube, it forms a power-assisted system for respiratory protection against particles, organic gases and vapours with a minimum flow rate of 180 lpm.

Typical Applications

- Asbestos stripping
- Abatement
- Demolition
- Construction
- Maintenance activities
- Transportation

Features and Benefits:

Comfortable Airflow

- Comfortable constant flow 180 lpm - when combined with BT-50 Breathing Tube and 7900PF Full Face Mask
- Controlled airflow delivers steady flow as battery discharges or filter loads with particulates

Ease of Use

- TR-603E-ASB display shows battery charge status and particulate filter loading status during use
- Charge status is also indicated by a useful LED display on the battery
- No user calibration of turbo required
- Electronic audible, visual and vibratory alarm in case of low battery and/or low air flow

Multiple Applications

- Available with Particulate and Organic Gas and Vapour/Particulate options
- Easy clean belt – submersible belt with smooth surfaces allows easy, thorough cleaning
- Suitable for shower decontamination and temporary submersion to aid cleaning

Safety

- Approved to EN12942 Class TM3



3M™ Versaflo™ Powered Air Turbo TR-603E-ASB

(Includes Air Flow Indicator TR-972, Spark Arrestor x2 TR-662, Cleaning & Storage Kit TR-653)



3M™ Versaflo™ Powered Air Turbo Starter Kit TR-615E-ASB

This Versaflo™ Starter Kit includes the TR-603E-ASB Turbo, P filter, filter cover, spark arrestor, easy clean belt, high capacity battery, single station battery charger kit, BT-50 tight fitting breathing tube, airflow indicator, 7900PF Full face mask, cleaning kit, BT retainer and BT cover.

3M™ Versaflo™ Powered Air Turbo Starter Kit TR-618E-ASB

This Versaflo™ Starter Kit includes the TR-603E-ASB Turbo, A1 P filter, filter cover, spark arrestor, easy clean belt, high capacity battery, single station battery charger kit, BT-50 tight fitting breathing tube, airflow indicator, 7900PF Full face mask, cleaning kit, BT retainer and BT cover.



3M™ Versaflo™ Breathing Tube BT-50



Chargers

TR-641E Single Station Battery Charger Kit

TR-644E 4-Station Battery Charger Kit

Breathing Tube

BT-50 Breathing Tube

Mask

7900PF Full Face Mask

Spares & Accessories

TR-6600 Pre-filter TR-653 Cleaning & Storage Kit

TR-662 Spark Arrestor TR-651 Filter Latch Assembly

TR-972 Air Flow Indicator BT-922 Disposable Breathing Tube Cover

RTN-01 Retainer

Filter

TR-6710E P

TR-6110E A1P

Filter Covers

TR-6700FC

TR-6100FC

Batteries

TR-632 High Capacity Battery

Belts

TR-627 Easy Clean Belt



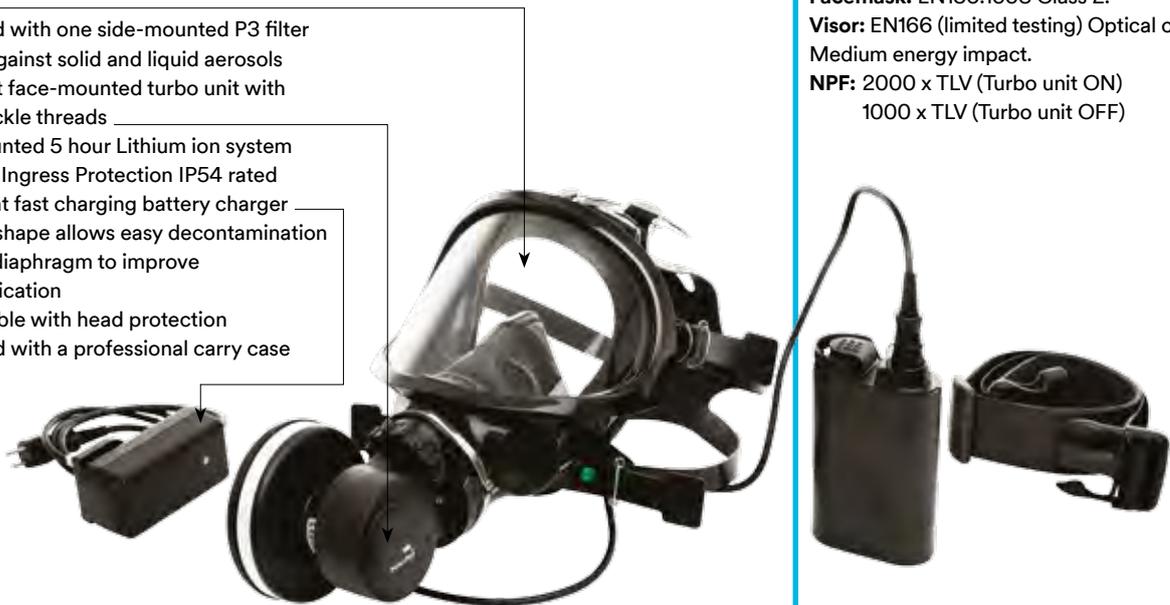
3M™ Powerflow™ Powered Air Respirator 7900PF

The 3M™ Powerflow™ Face-mounted Powered Air Respirator System 7900PF is a single, optimised personal system combining effective, robust and reliable protection against respiratory, face and eye hazards present in the stripping and abatement of asbestos.

The system combines a comfortable elastomeric full-face mask with an industry proven powered air turbo and particulate filter combination in an easy to use and easy to decontaminate total system solution.

Features and Benefits:

- Six strap harness
- Quick release buckles
- Soft and pliable silicone
- Lightweight battery and full facepiece
- Large Polycarbonate lens with wide field of view
- Equipped with one side-mounted P3 filter for use against solid and liquid aerosols
- Compact face-mounted turbo unit with DIN knuckle threads
- Belt-mounted 5 hour Lithium ion system battery - Ingress Protection IP54 rated
- Intelligent fast charging battery charger
- Smooth shape allows easy decontamination
- Speech diaphragm to improve communication
- Compatible with head protection
- Delivered with a professional carry case



Typical Applications

- Asbestos stripping
- Abatement

3M™ Powerflow™ Face-mounted Powered Air Respirator System 7900PF

Approvals

Respirator: EN12942:1998, Protection Class TM3P.

Facemask: EN136:1998 Class 2.

Visor: EN166 (limited testing) Optical class 2, Medium energy impact.

NPF: 2000 x TLV (Turbo unit ON)
1000 x TLV (Turbo unit OFF)

3M™ Powerflow™ 7900PF

Filters	Part No
Prefilter	461-00-02P24X5
Prefilter with holder	461-00-20P10X5
P3 Filter (pack of 3)	450-00-02P3X12

Consumables	Part No
Powerflow Turbo Unit	PFT-01
Battery	BAT-25
Individual charger	CHG-03
Decontamination kit and canister cover	024-04-02P
Easy-clean belt	031-35-00P4
Airflow Indicator Tube	031-34-02P

3M™ Full Face Mask

Consumables	Part No
Full Face Mask	7900PF
Six-Strap Harness	7893
Lens	7927
Lens Covers	7992
Nose Cup Assembly	7991

Spare and Accessories	Part No
Spectacle Kit	7925
Exhalation Valve	7283
Speaking Diaphragm Kit	7895
Neck Strap Assembly	7883
Green Head Harness Buttons	7989





3M™ Airstream™ Respirator AS-300

The 3M™ Airstream™ system AS-300 is a helmet-mounted powered air respirator where the motor, fan and filter components are integrated into the helmet. The helmet is powered by a lightweight battery that can be fitted on the waist or in a pocket to improve the comfort and mobility of the user. The Airstream Powered Air Respirator has been very popular in industry for many years. They offer protection class TH1P R S against EN12941:1998+A2:2008 and an NPF of 10 x TLV against particulates only.

Typical Applications

- Metal Fabrication
- Quarries & Mining
- Smelting Foundries
- Battery, Lead recycling
- Woodworking
- Demolition
- Concrete/Cement

Features and Benefits:

- New visor design with larger viewing area provides eye and face protection to EN166:2001
- Robust and proven helmet design with optimised weight and balance provides head protection to EN397:2012
- Integrated turbo motor including filter cartridge and prefilter
- Head and face seals
- Lightweight belt-mounted 5 or 8-hour NiCd battery
- Electronic battery charger
- Combines respiratory, head, eye and face protection; hearing protection optional
- Easy to maintain, spare parts are quick, easy and intuitive to replace
- Easy to use filter system offers Particulate or Particulate and nuisance organic vapour protection



3M™ Airstream™ Ready-to-use Kit AS-300-1 Protection against solid particles

This 3M™ Airstream™ AS-300-1 Starter kit includes a motor and fan mounted inside the new helmet, a combined head and faceseal, one particulate filter and one super battery.

Filter	Part No
Pre-filter (pack of 10)	060-22-00-P10
High efficiency main filter (pack of 10)	060-23-04P10 x4
Molten metal visor (pack of 20)	AS-361-10
Visor scratch resistant (pack of 20)	AS-362-10
Head and Faceseal	FSL-24
Visor surround assembly	AS-321

Batteries	
Standard Battery Pack	007-00-01P
Super Battery Pack	007-00-03P

Chargers	
Single station charger (Standard Battery pack, EU)	003-00-20PEU
Single station charger (Super Battery pack, EU)	003-00-51P
Single station charger (Standard Battery pack, UK)	003-00-00P
Single station charger (Super Battery pack, UK)	003-00-04P



Hearing solutions



The Challenge of Hearing Protection

40 million workers are exposed to loud noise and 13 million suffer from hearing disorders despite industry regulations*.

You can advance your hearing conservation programme with a customised and comprehensive approach to the hearing protection challenge. Implementing a solution that really makes a difference begins with understanding the hazards, the regulation and the factors that impact protection.

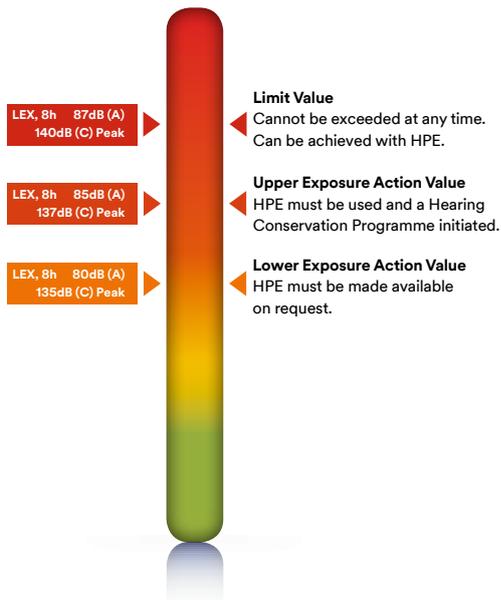
* Source: European Agency for Safety and Health at Work

The Facts

The #1 Reported Occupational Health Issue: data from the European Agency for Safety and Health at Work shows that noise induced hearing loss is the most commonly reported occupational medical condition in the EU.

One Third of European Employees Potentially at Risk: according to the EU OSHA one third of workers in Europe are exposed to potentially dangerous levels of noise

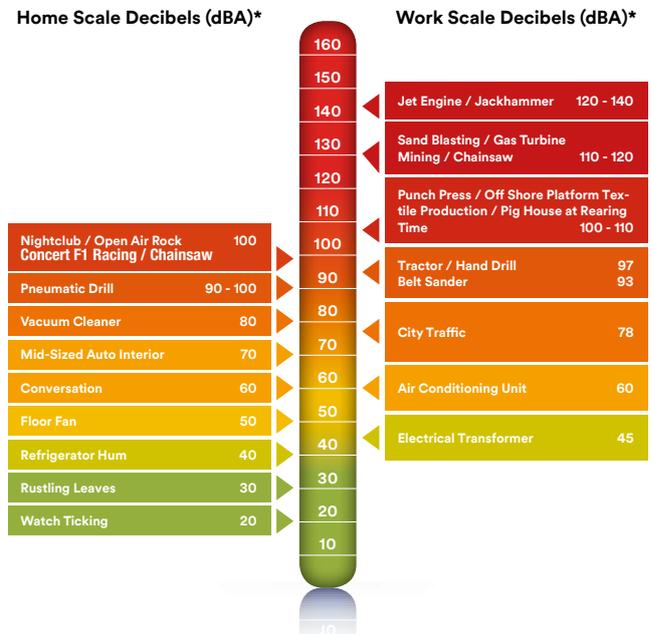
The Regulations



Between the lower and upper exposure Action Values, it is necessary to provide information on potential risks, provide training and appropriate hearing protection devices. Audiometric checks should also be used as a preventative measure. Above the Upper Exposure Action Value, measures to reduce exposure to noise must be implemented and individuals must be protected with the provision of PPE and have controlled entry to areas of exposure. A Hearing Conservation Programme must also be instigated.

The Hazards

At home and work, it's important to understand which sounds may cause hearing loss and require hearing protection.



The Real World Hearing Concerns of Hearing Protection
Variable Noise Levels: Every environment is different and workers can face a wide range of sound levels throughout the day and in different areas at the same facility.

The Human Factor: Each person has a different shape, size and anatomy of the ear canal, so there is no one-size fits all hearing protection solution. The key to achieving optimal protection is having the best fit possible.

Employee Communication: Where there is an essential need for workers to communicate or hear warning sounds it is vital that their hearing is protected from hazardous noise levels.



The Solution, 3M Detection, Protection and Validation

As a global leader in sound and noise detection, hearing protection and fit test validation, 3M delivers easy and comprehensive solutions to complex hearing protection challenges.

Accurate Noise Detection. The first step in solving the challenge is to measure the noise levels facing your workers. 3M Detection Solutions make it easy to measure noise hazards, so you can select the appropriate protection for the job. Our detection instruments deliver accurate and reliable measurements and detection management software makes it easy to report and share data.

Adaptable Hearing Protection. 3M delivers a wide range of innovative hearing protectors, making it easy to select the right solution for the job. A variety of types and sizes of earplugs and earmuffs are available helping your team determine the right fit for each person and the right protection for the application. Our innovative products are designed for comfortable, extended wear, and they can help your team comply with your safety program.

Fit Test Validation. Integrating hearing protector fit testing into your hearing conservation program benefits everyone from new hires to high-risk workers. The 3M™ E-A-Rfit™ Validation System makes it easier to fit, train and motivate workers and to assess and manage the long-term performance of your hearing conservation program.

3M's broad range of hearing protection devices in a variety of types and styles helps you solve many of the challenges facing workers in various environments.

E·A·Rfit™





Detection Solutions

Detection is the first step in identifying where hearing protection may be needed. 3M delivers intuitive solutions for effective noise monitoring programs. Durable, accurate, and easy-to-use instrumentation makes it simple to report and share noise exposure data. 3M Detection products deliver innovatively simple solutions to complex monitoring challenges.

For more information and to see our full line of detection solutions, please contact your 3M sales representative or visit www.3M.com/detection.



Noise Indicator™ NI-100

The 3M™ Noise Indicator NI-100 alerts users to potentially dangerous noise levels, helping to identify areas where hearing protection may be required. Users simply clip the Noise indicator to a shirt or jacket; its LED light provides a clear visual indication when noise levels exceed a potentially hazardous threshold.

The NI-100's small size and lightweight design make it ideal for workers in a variety of industries. In a variable noise environment the "Go/No Go" simplicity of the 3M™ Noise Indicator™ offers an indispensable tool for training and promoting voluntary hearing protection compliance in all areas of the work place.

Visual "Go/No Go"

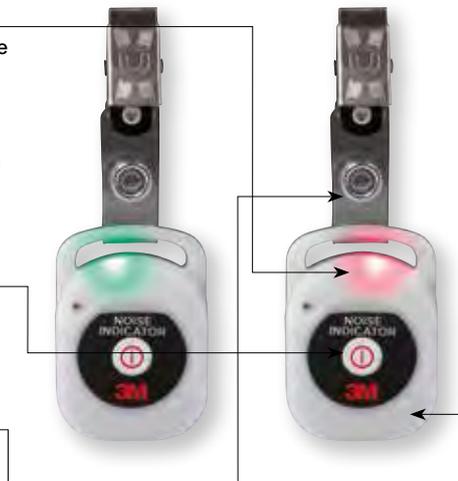
- Green LED ("Go") flashes when noise level is below 85dB(A)
- Red LED ("No Go") flashes when noise level exceeds 85dB(A)
- Easy-to-understand visual indication when hearing protection may/may not be needed

One-button operation

- Simply clip to shirt and power-on
- Easy for workers to use and understand

Easily attached

- Clips to a wearer's shirt or can be worn as a lanyard



Rechargeable battery

- Provides up to 200 hours of use between charges
- 10-hour auto-power off helps prolong battery life for extra cost savings



Small size

- Compact, lightweight design for increased hearing protection compliance

3M™ Sound Detector SD-200 with Optime™ Alert System Linkage

The 3M™ Sound Detector SD-200 is a compact, lightweight sound level meter, designed to accurately measure workplace noise levels. Green, yellow and red LEDs flash the colour that corresponds to the 3M™ Optime™ Alert System, making it easy to select the appropriate level of hearing protection.

Industry compliant

- Meets applicable European ANSI and IEC Class 2 standards
- Consistent performance with accurate, actionable readings

Average sound pressure level (LEQ/LAVG)

- Integrating feature computes the average sound pressure level
- Provides stable readings where noise levels typically vary, for easier interpretation

User-friendly

- Simple four-button navigation to perform all functions
- Comes ready to take measurements; no configuration necessary



LED alerts match Optime™ Alert System

- Tri color LED's flash brightly when preset noise levels are reached
- Helps user understand where hearing protection may need to be worn

Green LED flashes when noise measurements are between 80 and 85dB

Yellow LED flashes when noise measurements are between 85 and 105dB

Red LED flashes when noise measurements are above 105dB



Rechargeable

- Lithium polymer battery provides up to 50 hours of use between charges
- Reduces the cost and hassle of replaceable batteries



3M™ Sound Examiner™ Sound Level Master SE-400

The Sound Examiner SE-400 series of sound meters are engineered to accurately measure noise levels in highly variable environments. The intuitive interface of this user-friendly sound level meter allows for out-of-box use with little to no training.



Features and Benefits:

Removable preamp

- Preamp can be easily removed to enable interference-free low-level monitoring, especially for remote use

Aerodynamic shape

- Minimizes disturbance to sound fields being measured, assuring accurate readings

Onboard Data Logging

- Allows user to capture maximum, minimum and peak value analysis.
- Can be used with 3M™ Detection Management Software DMS to manage compliance with hearing conservation programs

Display

- Display Languages: English, Spanish, German, French, Italian or Portuguese
- Display SPL, LMAX, LMIN, Peak, Lavg/Leq, Elapsed Time

Conformance to standards

- Meets IEC 61672-1 (2002) and ANSI S1.43-1997 (R2007) standards and is CE certified



Choice of microphones

- User can specify microphone type (Class/Type I or Class/Type II) based on application.
- Select Type II for general duty; Type I accuracy for legal metrology



SoundPatrol portable digital printing (optional)

- Enables hard-copy documentation of measurement results in the field
- Facilitates noise ordinance enforcement and on-the-spot citation issuance

Choose the Model That Best Meets Your Needs	Sound Examiner SE-401	Sound Examiner SE-402	Sound Examiner SE-402-R	Sound Examiner SE-401-IS	Sound Examiner SE-402-IS
Product No.	SE-401	SE-402	SE-402-R	SE-401-IS	SE-402-IS
Intrinsically safe				•	•
Data Logging	•	•	•	•	•
DMS Compatible	•	•	•	•	•
Class/Type 2 Accuracy		•	•		•
Class/Type 1 Accuracy	•			•	
External AC/DC Output	•	•	•		
Portable Printing Option	•	•	•		
Removable Preamp	•		•		



3M™ The Edge Personal Noise Dosimeter

The Edge family of personal noise dosimeters offer a cable-free, compact monitoring solution that mounts comfortably to the shoulder. Its large display with easy to use interface provides crucial information at a glance and its data logging capability allows for advanced reporting and analysis.



Features and Benefits:

LED dose indicator

- LED indicator can be programmed to flash when dose level has been exceeded
- Helps safety manager and employees easily identify who has reached their daily maximum noise dose exposure

Three independent dosimeters

- Edge eg5 enables simultaneous measurement against as many as three industry standards (e.g. EU, OSHA PEL, OSHA HC, ACGIH)
- Saves time and cost by reducing the need for multiple sampling surveys

Display with lockout ability

- Easy-to-read design enables workers to monitor their own noise exposure. If desired, unit can be set to inhibit display, for easier testing and verification
- Provides safety professionals the options needed to achieve compliance with hearing protection standards



Efficient Setup

- Infrared communication port to EdgeDock provides quick USB connection to 3M™ Detection Management Software
- Helps safety professional easily setup one or more Edge dosimeters

Contoured shoulder mount

- Ergonomically designed and comfortable; weighs just 85g
- Lightweight and unobtrusive design assures comfort

Intrinsic safety approvals

- The Edge eg5 carries Intrinsic Safety Approvals from MSHA, SIRA (ATEX), CSA (US and Canada) and Simtars (IECEX)
- Monitoring can be safely performed in potentially hazardous environments where devices must be certified

3.5" long x 2.1" wide x .75" thick
(88mm x 53mm x 19mm)

	Edge 4 Noise Dosimeter	Edge 5 Noise Dosimeter
Product No.	eg4-D	eg5-D
3M ID	70071579273	70071579307
Data Logging	•	•
Battery Life	60+ hours	40 hours



3M™ Detection Management Software DMS

Designed for dosimetry, sound level measurements, heat stress assessments and environmental monitoring, this advanced software helps safety and occupational professionals.

Configure instrumentation and save pre-configured setups **Analyse**, retrieve, download, share and save instrument data. Create charts, tables and panels to intuitively interpret your measurements. Perform advanced calculations. **Report**, generate insightful charts and reports, export and share the recorded results.

The software integrates with 3M™ Detection Solutions data logging instruments and will help you improve both operating efficiency and reporting in acoustics, heat stress, and environmental monitoring.

Features and Benefits:

Global platform

- Languages supported: Chinese, Czech, English, French, German, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Russian, Spanish, Swedish, and Turkish
- Single software package enables companies with multiple locations to easily align programs and share data across regions and divisions

Wide-range application support

- Noise dosimetry
- Octave band sound analysis/survey
- Thermal comfort monitoring
- Integrating sound level meter
- Industrial and community sound surveys
- Indoor air quality (IAQ) assessment
- Area and personal heat stress monitoring

User-friendly interface

- Intuitive operation, helpful icons and simple graphing tools enable efficient usage
- “Click, Drag and Drop” report-building
- Data Finder provides quick access to stored information
- Easy to learn and use without the need for extensive training

All-in-one software solution

- Integrates with currently manufactured models of 3M Detection data logging instruments
- Centrally organize and access exposure data across acoustics, heat stress and environmental monitoring categories
- Generate powerful charts and reports including logged data, statistics, exceedance, and filter summary
- Saves time spent switching between software applications

Powerful tool for analysis

- Quickly create insightful charts including logged data, exceedance, filter summary and more
- Ready-to-use chart templates help generate impactful reports to support safety program compliance efforts



System Requirements

Pentium 4, 3GHz or later

2GB RAM

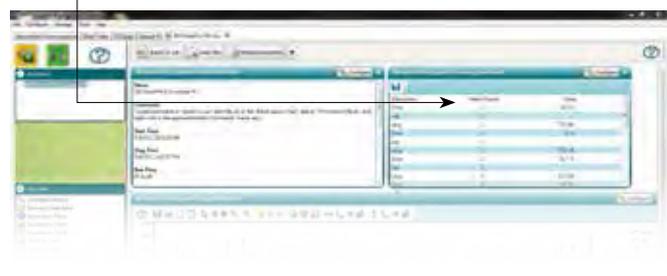
Windows XP, SP2 or later, Windows 7, 8, both 32 and 64 bit systems

1280 x 1024 pixels x 32-bit color display

70 -135 MB of disk space, depending on previously installed components

Keyboard

Mouse or pointing device



Product No.	Description	3M ID
DMS	Detection Management Software	70-0716-0821-3



Hearing Protection

Hearing protection must be right for you and your situation. For safety, productivity and comfort, it must reduce noise by the right amount, not too little and not too much. 3M can provide solutions for different individuals and applications with a wide range of earmuffs and earplugs.

3M Optime™ Alert System

Our system uses a simple, logically coloured classification to make the selection process easy. Firstly find out what your noise level is, then look at the icons below and establish which noise band (RNR) your noise level falls into. Take note of the icon and choose from the wide range of products featuring the correct icon (see summary table on next page).

The 3M Optime™ Alert system has been incorporated into the 3M SD-200 sound detector that highlights the appropriate 3M hearing protection required.

*RNR = Recommended Noise Rating





3M™ Optime™ Alert System by Product



GREEN OPTIME™ ALERT SYSTEM RNR* < 85dB(A)

Hearing protection is not compulsory but is made available to workers for their comfort and protection.

Ultrafit 14 Earplugs - SNR: 14dB



YELLOW OPTIME™ ALERT SYSTEM 83dB(A) - 93dB(A)

You must assume you are above the permitted exposure level, hearing protection is compulsory.

E-A-Rsoft 21 Earplugs - SNR: 21dB
Ultrafit 20 Earplugs - SNR: 20dB
ClearE-A-R 20 Earplugs - SNR: 20dB
Tracer 20 Earplugs - SNR: 20dB
Ultratech Earplugs - SNR: 21dB
E-A-Rband Earplugs - SNR: 21dB
Caboflex Earplugs - SNR: 21dB



RED 1 OPTIME™ ALERT SYSTEM 87dB(A) - 98dB(A)

You are above the permitted exposure level, hearing protection is compulsory. Ideal for high frequency noise.

Classic Earplugs - SNR: 28dB
Express Earplugs - SNR: 28dB
1261/1271 Earplugs - SNR: 25dB
E-A-Rcaps Earplugs - SNR: 23dB
Flexicap Earplugs - SNR: 23dB
Pulsar Earplugs - SNR: 23dB
Swerve Earplugs - SNR: 24dB
1310 Earplugs - SNR: 26dB
Reflex Earplugs - SNR: 26dB
Optime I Earmuff - SNR: 26/27/28dB (depending on the version)
Bulls'eye I Earmuff - SNR: 27dB
H 31 Earmuff - SNR: 27/28dB (depending on the version)



RED 2 OPTIME™ ALERT SYSTEM 94dB(A) - 105dB(A)

You are above the permitted exposure level hearing protection is compulsory. Ideal for high and medium frequency noise.

Classic Corded Earplugs - SNR: 29dB
Torque Earplugs - SNR: 32dB
Tri-Flange Earplugs - SNR: 29dB
Tracers Earplugs - SNR: 32dB
Ultrafit Earplugs - SNR: 32dB
Optime II Earmuff - SNR: 30/31dB (depending on the version)
PTL Earmuff - SNR: 29/31dB Depending On The Version
Bulls'eye II Earmuff - SNR: 31dB



RED 3 OPTIME™ ALERT SYSTEM 95dB(A) - 110dB(A)

You are above the permitted exposure level, hearing protection is compulsory. Ideal for all frequencies.

Classic Soft Earplugs - SNR: 36dB
Superfit 33 Earplugs - SNR: 33dB
1120/1130 Earplugs - SNR: 34dB
E-A-Rsoft Neons Earplugs - SNR: 36dB
E-A-Rsoft Blasts Earplugs - SNR: 36dB
E-A-Rsoft Metal Detectable Earplugs - SNR: 36dB
Solar Earplugs - SNR: 36dB
1100/1110 Earplugs - SNR: 37dB
E-A-Rsoft Fx Earplugs - SNR: 39dB
No-Touch Earplugs - SNR: 35dB
Push-Ins Earplugs - SNR: 38dB
Ultrafit X Earplugs - SNR: 35dB
Optime III Earmuff - SNR: 34/35dB (depending on the version)
Bulls'eye III Earmuff - SNR: 35dB



PLEASE NOTE:

At levels above 95dB(A) you will need an accurate noise assessment to correctly select the product. Green and Yellow marked products are not suitable for use in low frequency noise.



Roll Down PU Foam Earplugs

Our Roll Down Earplugs are made from expandable Polyurethane (PU) foam, which provides great comfort and good protection. The one size fits most ear canals. Once inserted in the ear, the foam plugs expand to provide a snug and secure custom fit. 3M provides a wide range of disposable roll down PU foam earplugs to choose from and to find the best solution for your individual needs.

Features and Benefits:

Comfortable

- Soft hypoallergenic foam material for lower pressure inside the ear
- Smooth, dirt resistant surface for better hygiene, durability and comfort

Convenient

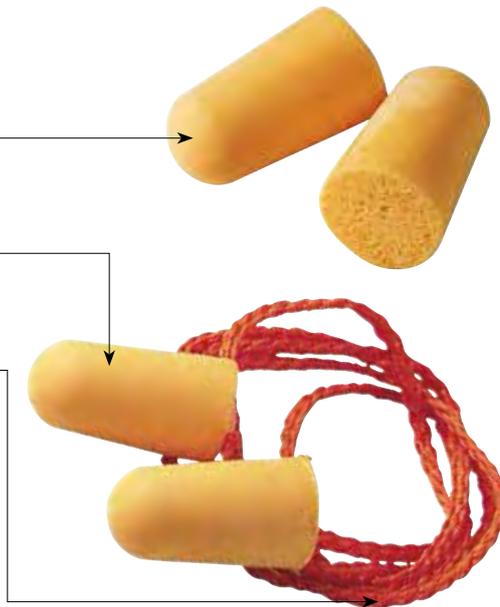
- Tapered design fits most ear canals making the plugs easier to use
- One size only
- Dispenser available (1100)
- Polyester cord (1110) helps prevent loss of earplugs

Effective

- High SNR of 37dB

Compatible with

- Designed to be compatible with other PPE



Attenuation*

3M™ Earplugs 1100/1110

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	30.0	33.1	36.3	38.4	38.7	39.7	48.3	44.4
Standard Deviation (dB)	3.9	5.0	7.4	6.2	5.6	4.3	4.5	4.4
Assumed Protection (dB)	26.1	28.1	28.9	32.2	33.1	35.4	43.8	40.0

SNR=37dB H=37dB, M=34dB, L=31dB



3M™ Disposable Earplugs 1100/1110

Available corded, uncorded and with dispenser SNR: 37dB

Other 3M™ Disposable Earplugs



3M™ Earplugs 1120/1130
Especially designed for smaller ear canals
Available corded, uncorded and with dispenser
SNR: 34dB



3M™ Solar™ Earplugs
Colourful Earplugs
Available corded, uncorded and with dispenser
SNR: 36dB



3M™ E-A-R™ EARsoft™ Yellow Neons™ and Yellow Neon Blast™ Earplugs
The E-A-R™ standard PU earplugs. Available corded (Yellow Neons), uncorded and with dispenser. Compatible with E-A-Rfit™ validation system
SNR: 36dB



3M™ E-A-R™ EARsoft™ 21 Earplugs
The low attenuation disposable earplugs
Only available uncorded
SNR: 21dB



3M™ E-A-R™ EARsoft™ FX Earplugs
The highest attenuation. Available uncorded
SNR: 39dB



3M™ E-A-R™ EARsoft™ Metal Detectable Earplugs
The traceable disposable earplugs with cord. Compatible with E-A-Rfit™ validation system
SNR: 36dB

3M™ Dispenser 1100B and 1120B

Now 3M One-Touch dispenser also available to dispense 3M™ Earplugs 1100 and 1120



3M™ E-A-R™ One-Touch™ Dispenser



* For further attenuation information please visit www.3M.eu/PPESafety



3M™ E-A-R™ Classic™ Earplugs

40 years ago this simple hearing protector, the world's first foam earplug, revolutionised hearing protection in the workplace and has remained to this day one of the most widely used earplugs in the world. Since its introduction to the market no other earplug has been studied and assessed in the field more comprehensively than the E-A-R Classic. Discover for yourself what makes the E-A-R Classic earplug so different and why it remains one of the most popular choices of earplug in the world today for attenuation, comfort and ease-of-fit.



Features and Benefits:

Attenuation

- Features a proprietary slow recovery vinyl foam, engineered to protect against noise and vibration
- Expands to the shape of the wearer's ear canal, thereby providing an effective acoustic seal
- Fully tested and CE approved against EN352-2:1993
- The unique 3M™ E-A-RFit™ Validation System allows users to obtain their own personal attenuation rating to help ensure best fit and protection

Comfort

- Cylindrical shape: Flat and cylindrical to provide an effective seal even with jaw movement
- Sweat and humidity resistant, enables easier fitting and helps prevent moisture build up in the ear canal
- Textured surface, provides greater friction to prevent slippage and maintain an effective seal over a prolonged wear time
- Soft energy absorbing foam offers a low equilibrium pressure

Ease-of-Fit

- Firm foam properties prevent the earplug from folding or collapsing when inserted into the ear canal
- Quick and easy to roll down with slow recovery foam for a good custom fit

Attenuation*

3M™ E-A-R™ Classic™ Earplugs (Uncorded version)

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	22.3	23.3	24.6	26.9	27.4	34.1	41.6	40.4
Standard Deviation (dB)	5.4	5.3	3.6	5.4	4.8	3.1	3.5	6.4
Assumed Protection (dB)	16.9	18.1	20.9	21.5	22.6	30.9	38.1	34.0

SNR=28dB H=30dB. M=24dB. L=22dB

* For further attenuation information please visit www.3M.eu/PPEsafety



3M™ E-A-R™ Classic™ Earplugs

Available corded, uncorded and with dispenser
SNR: 28dB

Other 3M™ Disposable Earplugs



3M™ E-A-R™ Classic™ Soft Earplugs

Softer Classic earplugs for increased comfort
Available corded, uncorded and with dispenser
SNR: 36dB



3M™ E-A-R™ Classic™ Small Earplugs

Reduced diameter for smaller ear canals
Only available uncorded
SNR: 28dB



3M™ E-A-R™ Superfit™ 33 Earplugs

With exclusive fitting ring
Available uncorded and with dispenser
SNR: 33dB



3M™ E-A-R™ Superfit™ 36 Earplugs

With exclusive fitting ring
Available uncorded in Pillowpack
SNR: 36dB



3M™ E-A-R™ One-Touch™ Dispenser



Pod Earplugs

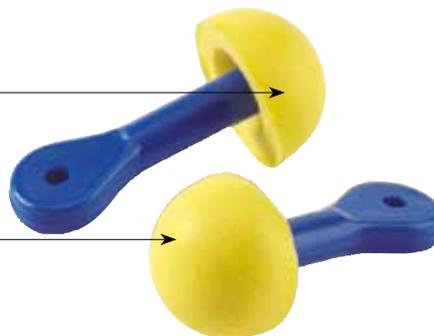
Pod earplugs are very easy to insert since there is no roll down needed: just use the soft flexible grip to push the earplug into position and achieve excellent protection. Because you do not have to touch the foam during fitting it is one of the most hygienic types of earplug available.



Features and Benefits:

Comfortable

- Unique pod design allowing the foam to compress easily
- The plug slides gently into the ear and expands slowly
- Patented E-A-Rform foam tip shaped and sized to mold comfortably fitting virtually every size ear canal



Convenient

- Available corded or uncorded
- No roll down required
- Washable and reusable
- The insertion stem eliminates the need to touch the tip: no need to clean your hands



Compatible with

- Designed to be compatible with other PPE

Attenuation*

3M™ E-A-R™ Express Earplugs

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	27.8	26.0	24.9	25.2	29.4	34.9	37.0	35.9
Standard Deviation (dB)	5.4	4.5	3.3	5.0	4.2	4.1	5.2	3.7
Assumed Protection (dB)	22.4	21.5	21.5	20.2	25.2	30.8	31.8	32.2

SNR=28dB H=30dB, M=24dB, L=22dB

* For further attenuation information please visit www.3M.eu/PPESafety

3M™ E-A-R™ Express™ Earplugs

Available corded, uncorded
SNR 28dB

Other Pod Earplugs

- 
3M™ Torque™ Earplugs
 The tough pod plugs
 Available corded
 SNR: 32dB
- 
3M™ No-Touch™ Earplugs
 The colourful pod earplugs
 Available corded
 SNR: 35dB
- 
3M™ E-A-R™ Push-Ins™ Earplugs
 The disposable pod earplugs with high attenuation Available corded and uncorded. Compatible with E-A-Rfit™ validation system
 SNR: 38dB
- 
3M™ Pistonz™ Earplugs
 The earplug designed for motorsport and automotive segments
 Extra comfortable foam
 SNR : 25dB



Pre Moulded Earplugs

Pre Moulded plugs are made from flexible materials that are preformed to fit the ear. They are generally available with a joining cord to prevent loss. These reusable earplugs are comfortable, hygienic and economical. No sizing is required for these patented, pre-moulded, triple flanged earplugs. Available in a variety of styles and protection levels.



Features and Benefits:

Comfortable

- Unique and patented tri-flange design for a perfect fit and comfort
- Easy to fit in the ear for a continuous and comfortable protection

Effective

- High attenuation (SNR: 32dB)

Convenient

- Available with a cord to prevent loss
- Washable and reusable
- Compatible with E-A-Rfit™ validation system to check Personal Attenuation Ratings

Versatile

- Different versions to various use: traceable, high and low attenuation versions

Compatible with

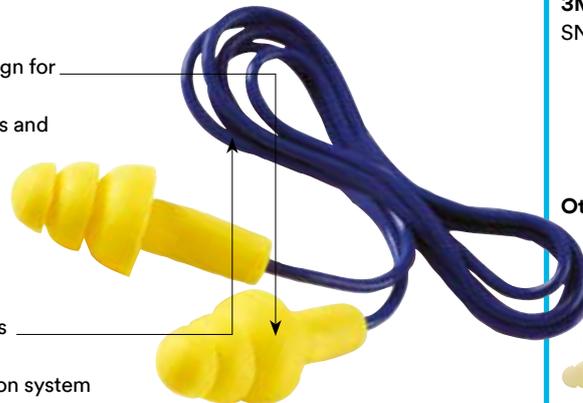
- Designed to be compatible with all types of PPE

Attenuation*

3M™ E-A-R™ Ultrafit™ Earplugs

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	29.2	29.4	29.4	32.2	32.3	36.1	44.3	44.8
Standard Deviation (dB)	6.0	7.4	6.6	5.3	5.0	3.2	6.0	6.4
Assumed Protection (dB)	23.2	22.0	22.7	26.9	27.3	32.8	38.3	38.4

SNR=32dB H=33dB. M=28dB. L=25dB APVf = Mf - sf



3M™ E-A-R™ Ultrafit™ Earplugs

SNR: 32dB

Other pre-moulded earplugs

3M™ E-A-R™ Ultrafit™ 14 and Ultrafit™ 20 Earplugs

The low attenuation E-A-R™ Ultrafit™ versions
SNR: 14dB
SNR: 20dB

3M™ E-A-R™ ClearEAR™ 20 Earplugs

The “nearly” invisible earplugs
SNR: 20dB

3M™ E-A-R™ UltraTech™ Earplugs

UltraTech earplugs greatly improve the ability to perceive speech, warning signals and machinery noise whilst reducing harmful noise levels effectively.
SNR: 21dB

3M™ Earplugs 1261/1271

The pre-moulded earplug with convenient storage case Available corded and uncorded
SNR: 25dB

3M™ E-A-R™ Tracers™ and Tracers™ 20 Earplugs

Metal detectable version
SNR: 32dB
SNR: 20dB



3M™ Tri-Flange™ Earplugs
Comfort and design Available with vinyl or cotton cord
SNR: 29dB



3M™ E-A-R™ Ultrafit™ X Earplugs
The high attenuation pre-moulded earplugs Available corded
SNR: 35dB



* For further attenuation information please visit www.3M.eu/PPEsafety



Banded Earplugs

Banded hearing protectors are easy to use, convenient and extremely comfortable. They are quick to insert and remove and can be stored around the neck when not required, making them ideal for intermittent use. Banded hearing protectors offer simplicity to help improve the choice of hearing protection products that best suits the work place environment. Most models are available with replacement pods making them a more cost-effective option.



Banded Earplugs can be worn in a variety of modes:

- Behind-the-Head (B-T-H)
- Under-the-Chin (U-T-C)
- and/or Over-the-Head (O-T-H)

Features and Benefits:

Comfortable

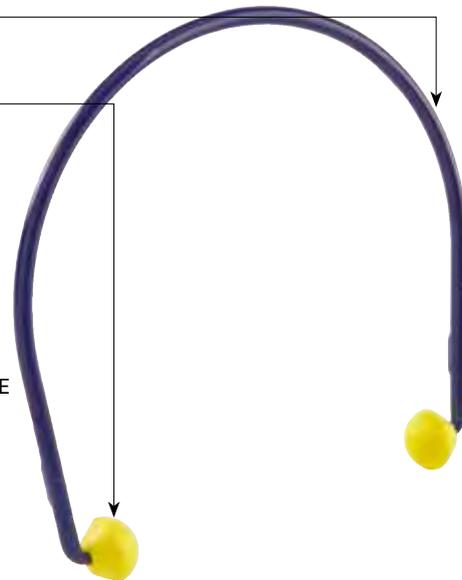
- Extremely light
- Very low pressure into the ear
- Pod plugs seal the entrance part of the ear canal with no deep insertion

Convenient

- Wear in Under-the-Chin (U-T-C) mode
- Easy to use
- Ideal for people moving in and out
- Replacement pods available

Compatible with

- Designed to be compatible with other PPE



Attenuation*

3M™ E-A-R™ EARcaps™ Earplugs (In U-T-C mode)

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	21.0	20.2	19.8	19.1	23.2	33.4	41.0	40.7
Standard Deviation (dB)	4.1	4.4	4.2	4.3	3.7	4.5	2.9	5.4
Assumed Protection (dB)	16.9	15.8	15.5	14.8	19.5	29.0	38.1	35.2

SNR=23dB H=27dB. M=19dB. L=17dB

3M™ E-A-R™ EARcaps™ Earplugs

Replacement pods available
SNR: 23dB (U-T-C)

Other banded earplugs



3M™ E-A-R™ EARband Earplugs

The ergonomic banded earplugs Replacement pods available. Wear Behind-the-Head
SNR: 21db (B-T-H)



3M™ E-A-R™ Caboflex™ Earplugs

The banded earplugs with durable conical shaped insert Replacement pods available. Wear Behind-the-Head or Under-the-Chin
SNR: 21dB (U-T-C)



3M™ E-A-R™ Flexicap Earplugs

The multi-position banded earplugs Replacement pods available. Wear Behind-the-Head, Under-the-Chin or Over-the-Head
SNR: 23dB (U-T-C)



3M™ Pulsar™ Earplugs

Design and ergonomoy. Wear Behind-the-Head
SNR: 23dB (B-T-H)



3M™ E-A-R™ Swerve™ Earplugs

The high-end banded earplugs with adjustable band Replacement pods available. Wear Behind-the-Head
SNR: 24dB (B-T-H)



3M™ Earplugs 1310
The high flexibility band Replacement pods available. Wear Behind-the-Head or Under-the-Chin
SNR: 26dB (U-T-C)



3M™ E-A-R™ Reflex Earplugs
The multi-position banded earplugs with conical tips Replacement pods available. Wear Behind-the-Head, Under-the-Chin or Over-the-Head
SNR: 26dB (U-T-C)

* For further attenuation information please visit www.3M.eu/PPEsafety



3M™ PELTOR™ Optime™ Earmuffs

The 3M™ PELTOR™ Optime™ Earmuffs have been developed for demanding noisy environments and are effective in reducing even extremely low frequency sound. The sealing rings are filled with a unique combination of liquid and foam. The result is an optimum seal with low contact pressure, which provides agreeable comfort even during long periods of use. The sealing rings have ventilation channels and are covered with soft, patterned, hygienic foil. The product is also available in an electrically insulated (dielectric) version without visible metal parts

PELTOR™

Features and Benefits:

Comfortable

- Generous space inside the cup to help the ears breathe thus improving comfort
- Soft and wide sealing rings filled with a unique combination of foam and liquid to offer optimum sealing and low pressure
- Sealing rings with ventilation channels and covered with soft, patterned hygienic foil

Effective

- High attenuation despite lightness and low profile design: 31dB SNR
- Unique band design, stainless steel wire for constant pressure over long periods of use

Versatile

- Available in several versions including: Headband, foldable, neckband and helmet mounted versions. All versions are available in high visibility colours



3M™ PELTOR™ Optime™ I Earmuffs Headband

Features:
Low profile, light-weight design (180g) helps improve compatibility with other safety equipment
Moderate attenuation:
SNR: 27dB



3M™ PELTOR™ Optime™ III Earmuffs Headband

Features:
Broad sealing rings
Very high attenuation:
SNR: 35dB
Twin cup design minimises resonance for excellent high-frequency attenuation



3M™ PELTOR™ Optime™ Food industry Earmuff
Easy to clean, moisture resistant
Optime™ II SNR: 30dB



3M™ PELTOR™ Optime™ Push To Listen (PTL) Earmuff
Optime™ Earmuff with a listening function
Optime™ II SNR: 31dB
Also available in Hi-Viz and Helmet mounted version
Optime™ II SNR: 29dB

3M™ PELTOR™ Optime™ II Earmuffs Headband
SNR: 31dB

Accessories

Hygiene kits are available for each earmuff version

Other PELTOR™ Optime™ Earmuff options:



3M™ PELTOR™ Optime™ Neckband
Offers excellent compatibility with other PPE
Optime™ I SNR: 28dB
Optime™ II SNR: 31dB
Optime™ III SNR: 35dB



3M™ PELTOR™ Optime™ Foldable Headband
Easy-to-store solution
Optime™ I SNR: 28dB
Optime™ II SNR: 31dB



3M™ PELTOR™ Optime™ Helmet attachment
Can be worn with a wide range of safety helmets
Optime™ I SNR: 26dB
Optime™ II SNR: 30dB
Optime™ III SNR: 34dB



3M™ PELTOR™ Optime™ Hi-Viz Headband
For workers in need of extra visibility
Optime™ I SNR: 28dB
Optime™ II SNR: 31dB
Optime™ III SNR: 35dB



3M™ PELTOR™ Welding Earmuff
Designed for welders
Fits into welding helmets
Optime™ I SNR : 24dB

* For further attenuation information please visit www.3M.eu/PPEsafety



3M™ PELTOR™ Earmuffs X Series

The 3M™ PELTOR™ Earmuffs X Series have been developed on the basis of design, comfort and attenuation techniques. This new range sets a new standard for over-the-ear protection. The 3M™ PELTOR™ X3 earmuffs are the first of our new range of products to utilise a newly designed spacer to help improve attenuation without the need for double cup design, thus increasing the space inside the cup for greater comfort and wearability.

Features and Benefits:

Comfort

- Easy to adjust headband
- Electrically insulated (dielectric) wire headband with constant pressure over long wearing periods
- Twin headband design helps reduce heat build-up and provides a good fit and balance
- Earcups tilt for optimum comfort and efficiency

Protection

- New ear cushion foam technology for an effective acoustic seal and reliable protection
- New smart sealing ring
- Streamlined cups without compromising attenuation
- Compatible with a range of 3M eyewear and respirators (validated by internal testing)
- Also available as a helmet mounted version

Design

- Lightweight dual mould cups with maximum space inside to help minimise heat and moisture build up
- Integrated design for more robustness
- Colour-coded for ease of selection
- Easy to clean



PELTOR™

3M™ PELTOR™ X3 Earmuffs

3M™ PELTOR™ Earmuffs X1, X2 and X3



3M™ PELTOR™ X1 Earmuffs

SNR: 27dB
Available as headband or helmet mounted version. Colour coded green, indicating first level of attenuation within this range

Engineered around protection, comfort and design, making it highly versatile



3M™ PELTOR™ X2 Earmuffs

SNR: 31dB
Available as headband or helmet mounted version. Colour coded yellow, for moderately-high noise exposures

Based on the X1 design, but offering higher attenuation



3M™ PELTOR™ X3 Earmuffs

SNR: 33dB
Available as headband or helmet mounted version. Colour coded red for high noise exposure applications



3M™ PELTOR™ Earmuffs X Series

Historically higher attenuating earmuffs meant larger and bulky cups, but no longer. The 3M™ PELTOR™ Earmuffs X4 can attenuate by as much as 33dB whilst maintaining a sleek, low profile aesthetically pleasing design. Using the same innovative technology the 3M™ PELTOR™ X5 remains relatively lightweight with excellent balance and wearer comfort despite the larger cups, providing a SNR of 37dB.

PELTOR™

Features and Benefits:

Comfort

- Easy to adjust headband
- Electrically insulated (dielectric) wire headband with constant pressure over long wearing periods
- Twin headband design helps reduce heat build-up and provides a good fit and balance
- Earcups tilt for optimum comfort and efficiency

Protection

- Unique attenuation as a result of optimum combination of specially-formulated foam featured in the earcups, cushions and the innovative spacer and cup design
- Newly designed spacer improves attenuation without excess bulk or weight
- Also available as a helmet mounted version

Design

- Extremely lightweight (234g)
- Integrated design for more robustness
- Colour-coded for ease of selection
- Easy to clean
- Extremely slim design providing excellent compatibility with other 3M personal protection products



3M™ PELTOR™ X4 Earmuffs

3M™ PELTOR™ Earmuffs X4 and X5



3M™ PELTOR™ X4 Earmuffs

SNR: 33dB
Available as headband or helmet mounted version. Colour coded Fluorescent yellow-green, for high noise exposure applications and to ensure good visibility when working outdoors.

Features extremely slim and lightweight earcups which provide excellent compatibility when used with other 3M personal protection products.



3M™ PELTOR™ X5 Earmuffs

SNR: 37dB
Available as headband or helmet mounted version. Colour coded black for use in extremely high noise environments



Validation Solutions

Fit Testing Made Easy

To make sure they are getting the protection they need, you need to know the Personal Attenuation Rating (PAR) of every employee.

The highest-NRR earplug or earmuff won't provide the expected protection if it doesn't fit right or isn't used right. Once you know each employee's number, you'll be on the way to yours: 100% confidence in your hearing conservation program.



Validation

1 Fit

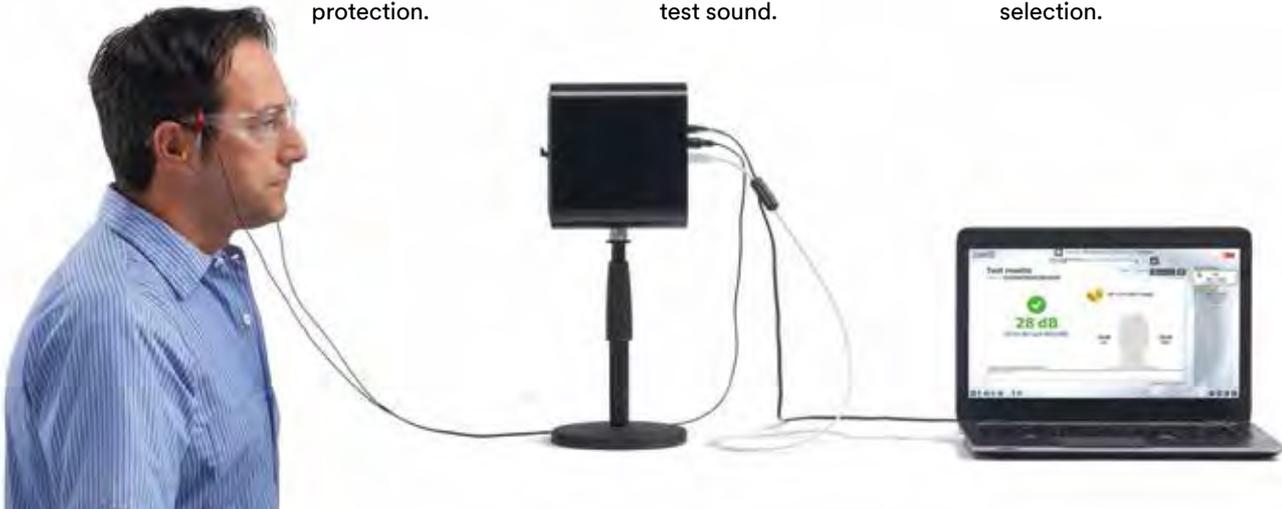
Have the employee insert their hearing protection.

2 Test

Connect to microphones and begin speaker test sound.

3 Assess

Use PAR to customise hearing protector selection.



10 dB
Right



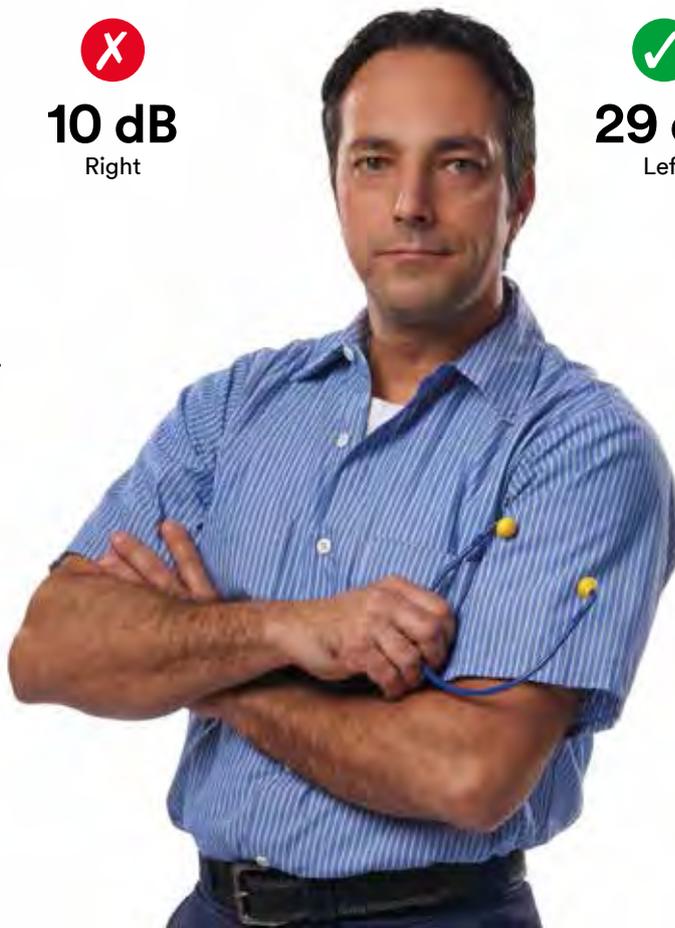
29 dB
Left

Fail

A 'fail' result means the hearing protection is either not inserted properly or is the wrong type or size for the worker's ear canal.

NOTE:

Finding out each employee's PAR is the first step to a successful conservation program. Once a worker's PAR is measured, you can determine if they're using the right hearing protection and ensure they're trained on using it properly.



Pass

A 'pass' result means the hearing protection is inserted properly and provides sufficient protection for the worker's specific job.



3M™ E-A-Rfit™ Dual-Ear Validation System

Fit testing is key, so make sure you get results you can trust. The 3M™ E-A-Rfit™ Dual-Ear Validation System measures the effectiveness of the earplug from inside the ear, providing accurate quantitative results. And because you can simultaneously test both ears, you'll have more time to educate employees on the importance of fit and compliance.

Features:

- Dual-ear testing
- Fast, clear accurate results
- Earmuff testing capability
- Tests all 7 frequencies
- Seamless software integration
- Science-based, quantitative testing
- Compact design





Communications Solutions

First-class communication and hearing protection!

There was a time when wearing hearing protectors meant being isolated and out of contact. Those days are over. Today, 3M™ PELTOR™ offers first-class communication solutions that not only make your working day safer and more efficient, but also much nicer!

Close up or far away the 3M™ PELTOR™ Communication Solutions for noisy environments make it possible for users of hearing protectors to communicate very effectively – with their immediate environment and with people further away.

Communication with people around you involves our level-dependent function for ambient listening and intercom systems. For longer distances, you have built-in two-way radios, DECT and Bluetooth® connections to mobile phones. All communication options can also be combined with a sound system such as an FM radio. Feel free to contact us for suggestions for a solution that meets your specific needs.

The Sound Solution

3M™ PELTOR™ products are developed for all environments where high safety must be combined with communication. Shop and industrial environments, construction sites, agriculture and forestry are a few examples.

We have developed several models to ensure there's a PELTOR Headset for every situation. Headband models for all-round use, and models with helmet attachments for people who wear safety helmets at work.

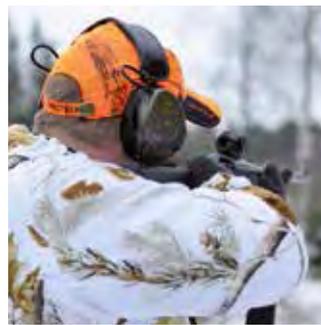
To ensure easy use of our products and good functions for all environments we use advance technology such as DECT and **Bluetooth®**.



Oil & Gas



Mining



Hunting & Sport shooting



Airport Ground handling



Military & Law enforcement



Aviation



Motorsport



Industry



3M™ PELTOR™ Level Dependent Ear Plug LEP-100 EU

The 3M™ PELTOR™ Level Dependent Earplug helps protect your hearing, and can help improve situational awareness and communications in challenging environments. Integrated with state-of-the-art level-dependent technology, the LEP-100 helps provide hearing protection in noise and situational awareness in quiet environments.

PELTOR™

Features and Benefits:

- Protects your hearing (SNR 32dB/38dB)
- Level dependent technology for situational awareness
- Intuitive one-button operation
- Recharge on the go
- LED charging status



Ultrafit^{G1}

Frequency (Hz) ^{G2}	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB) ^{G3}	34.5	31.5	36.2	33.4	34.8	34.9	38.8
Standard Deviation (dB) ^{G4}	6.0	5.4	5.6	4.3	3.8	5.0	4.0
Assumed Protection (dB) ^{G5}	28.5	26.1	30.6	29.1	31.0	29.9	34.8

^{G6} 9g SNR=32dB H=31dB. M=30dB. L=29dB

Torque^{G1}

Frequency (Hz) ^{G2}	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB) ^{G3}	37.8	36.0	40.5	41.2	41.3	39.6	46.1
Standard Deviation (dB) ^{G4}	4.3	5.5	4.2	4.7	3.2	4.3	3.6
Assumed Protection (dB) ^{G5}	33.5	30.5	36.3	36.5	38.0	35.3	42.5

^{G6} 9g SNR=38dB H=37dB. M=36dB. L=34dB

3M™ PELTOR™ Level Dependent Ear Plug LEP-100 EU

SNR: 32dB / 38 dB

Earpiece Power

Battery Type: Lithium Ion

Battery Life: Up to 16 hours

Battery Charge Time: Approximately 90 minutes

Volume Steps: 3 steps, Low, Medium, High

Case Battery Type: 3 AA Alkaline Batteries
Case Battery

Life: Up to 16 recharging cycles

Case USB Type: Micro B

Standards

Waterproof Rating: Complies with IP54 with cover and USB ports closed.

SNR: PPE directive 89/686/EEC

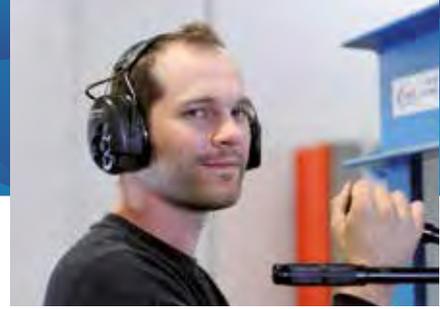
Physical Characteristics

Weight: Box containing charger, 2 earpieces, 4 pair communications eartips, cord, 3 AA batteries - 272g
1 earpiece - 4g

3M™ PELTOR™ Accessories

- 70-0716-7374-6 Communication Tips Replacement, Large
- 70-0716-7373-8 Communication Tips Replacement, Medium
- 70-0716-7372-0 Communication Tips Replacement, Small
- XH001679626 Torque™ Ear Tips, 50pr

* For further attenuation information please visit www.3M.eu/PPEsafety



3M™ PELTOR™ ProTac II

The 3M™ PELTOR™ ProTac II Level Dependent Hearing Protector improves safety for users in noisy environments. With ProTac II you can hear your surroundings and communicate with your colleagues without taking the hearing protector off. It safeguards your ears from harmful noise, while heightening your senses and ability to react.

Features and Benefits:

- Protects your hearing (SNR: 32dB)
- Level dependent technology enabling situational awareness
- External input jack
- Combined sound level of all incoming audio signals inside the cup limited to 82dB
- Operating time approx. 1000 hours with two AA batteries
- Also available as neckband or helmet attachment

Connects with

- DECT- and mobile phones
- Two-way radio



PELTOR™

3M™ PELTOR™ ProTac II

MT15H7A2 Headband
Available in: Black
SNR: 32dB

OTHER 3M™ PELTOR™ PROTAC II OPTIONS

3M™ PELTOR™ ProTac II
MT15H7B2 Neckband
Available in: Black
SNR: 32dB

3M™ PELTOR™ ProTac II
MT15H7P3E2 Helmet attachment
Available in: Black
SNR: 31dB

Battery Type: 2x AA 1.5 V

Operating time: Approximately 1,000 hours of battery lifetime with included alkaline batteries

Net Weight 392g (headband)
(Incl. Batteries): 406g (helmet att.)
370g (neckband)

Operating temperature: -20°C to +55°C (battery dependent)

Wired Connectivity: Audio input jack (J22)

3M™ PELTOR™ Accessories

HY79 Hygiene kit
ACK03 Rechargeable battery pack
FR03 Battery charger

Attenuation*

MT15H7A2 Headband



Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	17.0	25.6	34.0	37.4	36.4	38.6	38.2
Standard Deviation (dB)	2.8	3.0	3.4	3.2	3.6	3.6	3.4
Assumed Protection (dB)	14.6	22.6	30.6	34.2	33.2	35.0	34.8

SNR=33dB H=35dB M=31dB L=23dB

* For further attenuation information please visit www.3M.eu/PPEsafety



3M™ PELTOR™ WS™ Headset XP

In environments with potentially hazardous levels of noise, protecting your hearing is essential. But so is communicating with your team.

With built in Bluetooth® Wireless Technology the 3M™ WS™ Headset XP enables communication and the streaming of high quality stereo sound. So you can safely hear and communicate even in loud environments.

PELTOR™

Features and Benefits:

- CE-marked Hearing Protection
- Noise Cancelling Speech Microphone
- Bluetooth® Wireless Technology HS/HF and A2DP profile for communication and streaming high quality stereo sound
- Advanced Voice Operated Transmission (VOX) technology for hands-free communication in high noise environments
- Stainless Steel Wire Headband Wire headband offers comfortable pressure during prolonged usage.

Push-to-Talk (PTT)

- Ergonomically placed PTT-button on cup for easy operation

Hearing Protection

- Noise attenuating headset help provide hearing protection in environments with potentially hazardous noise



3M™ PELTOR™ WS™ Headset XP MT15H7AWS5

Technical data specifications Bluetooth® Wireless Technology Version: 2.1+EDR
 Frequency: 2400-2483.5 MHz
 Supported profiles: HF/HS version 1.5, A2DP version 1.2
 Output power: 2.5 mW

Other functions

- Power:** 2xAA NiMH or alkaline batteries, 1,2-1,5 V –
- Battery life time:** Operating time: 24 h, standby time: 150 h Low battery level is indicated by a voice message: “low battery”,
- Settings:** The last settings are stored when the headset is switched off
- Microphone:** Noise cancelling boom microphone
- Mode:** Stereo
- Auto power off:** 2 hours from last activation
- Menu voice guide language:** English

Storage

Recommended storage conditions: -20° C - +55° C, <90% humidity Recommended max. shelf life: 5 years except the batteries, <1 year
 Use limitation: Never modify or alter this product

3M™ PELTOR™ Accessories

- ACK053 Rechargeable battery
- FR08 Power supply
- FR09 Battery charger
- HY793 Hygiene Kit
- M995 Microphone Wind Protector
- HYM1000 Microphone Protector

Attenuation*

MT15H7AWS5 Headband



Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	17.4	24.0	31.9	34.4	35.1	37.0	35.1
Standard Deviation (dB)	2.0	2.6	3.0	2.6	4.3	4.0	3.2
Assumed Protection (dB)	14.5	21.1	28.9	31.9	30.9	33.1	32.0

SNR=31dB H=32dB. M=29dB. L=22dB

* For further attenuation information please visit www.3M.eu/PPEsafety

3M™ PELTOR™ WS™ ProTac XP

The 3M™ PELTOR™ WS™ ProTac XP Headset is equipped with a level-dependent function for situational awareness and communication. The headset features Bluetooth wireless technology and can also be connected via a jack to provide high quality communication and streaming.

The level-dependent function helps you hear ambient sounds such as external alarm signals or approaching vehicles. It also allows face to face communication in quiet environments. Robust design, clear controls and an intuitive menu system. This is a headset you will never want to take off.

Features and Benefits:

- Protects your hearing (SNR: 31dB)
- Noise cancelling speech microphone for clear communication in noisy environments using digital noise reduction
- Stainless steel wire headband for comfortable and consistent pressure
- Bluetooth® wireless technology for communication and streaming high quality stereo sound
- Advanced voice operated transmission (VOX) technology for hands-free communication in high noise environments
- Level-dependent function for situational awareness and communication
- External radio connection jack (only available in FLEX Connector version)
- Easy to use with four button operation
- Ghost voice guided menu system
- Auto power off in 2 hours from last activation
- Also available as neckband or helmet attachment

Connects with

- DECT- and mobile phones
- Two-way radio



Attenuation*

MT15H7AWS5 Headband



Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	17.4	24.0	31.9	34.4	35.1	37.0	35.1
Standard Deviation (dB)	2.8	2.9	3.0	2.6	4.3	4.0	3.2
Assumed Protection (dB)	14.5	21.1	28.9	31.9	30.8	33.1	32.0

SNR=31dB H=32dB. M=29dB. L=22dB

* For further attenuation information please visit www.3M.eu/PPEsafety



3M™ PELTOR™ WS™ ProTac XP
MT15H7AWS5 Headband
SNR: 31dB

Other 3M™ PELTOR™ WS™ ProTac XP options



3M™ PELTOR™ WS™ ProTac XP
MT15H7P3EWS5 Helmet attachment
SNR: 31dB

3M™ PELTOR™ WS™ ProTac XP
MT15H7BWS5 Neckband
SNR: 30dB

Frequency Range: 2400-2483.5 MHz

Bluetooth® Version: 2.1+EDR

Battery Type: Surround + Bluetooth (active): 24h, Surround only + Bluetooth off: 150h

Operating Time: Level Dependent + Bluetooth active: app 24h

Net Weight, (incl. batteries): Headband: 396g
Helmet Attachment: 421g
Neckband: 386g

Operating Temperature: -20°C to +55°C (battery dependent)

Wired Connectivity: Available with flex input jack

3M™ PELTOR™ Accessories

- ACK053 Rechargeable battery
- FR08 Power supply with USB connector
- FR09 Battery charger with USB connector
- M60/2 Wind shield for attenuation mic
- HYM1000 Hygiene tape for boom mic
- HY79 Hygiene kit



3M™ PELTOR™ FM-radio

3M™ PELTOR™ FM-radio can help improving safety and motivation for users in noisy conditions. If you want to protect your hearing and listen to the radio without outside interruption this is a good hearing protector for you.

PELTOR™

Features and Benefits:

- Protects your hearing (SNR: 32dB)
- Built in FM-radio receiver
- A separate audio input enables connection to external equipment such as MP3-player or two-way radio listening
- Battery life time approx. 140 hours
- Also available as helmet attachment

Connects with

- MP3-player



3M™ PELTOR™ FM-radio

HRXS7A-01 Headband
SNR: 32dB

Other 3M™ PELTOR™ FM-radio options



3M™ PELTOR™ FM-radio
HRXS7P3E-01 Helmet Attachment
SNR: 29dB

Battery Type: 2X AA 1.2–1.5V

Operating time: Approximately 140 hours of battery lifetime with included alkaline batteries

Net Weight (incl. batteries): 340 g (headband)
370 g (helmet att.)

Operating temperature: -20°C to +55°C (battery dependent)

Wired Connectivity: 3,5 mm AUX input jack (limited to 82dB(A))

3M™ PELTOR Accessories

HY81 Hygiene kit
HY100 Disposable hygiene pads

Attenuation*

HRXS7A-01 Headband



Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	17.6	26.2	34.9	37.7	33.3	35.7	36.8
Standard Deviation (dB)	2.9	1.8	2.5	2.6	3.4	2.1	3.3
Assumed Protection (dB)	14.7	24.4	32.3	35.0	29.9	33.6	33.5

SNR=32dB H=32dB, M=31dB, L=23dB

* For further attenuation information please visit www.3M.eu/PPesafety



3M™ PELTOR™ Alert™

The 3M™ PELTOR™ Alert™ Electronic Level Dependent FM-Radio can help improving safety and motivation for users in noisy environments. It enables you to listen to FM-radio or external device (MP3 player, mobile phone) at the same time as you can hear your surroundings and communicate with your colleagues without taking the hearing protector off. It safeguards your ears from harmful noise, while maintaining your ability to hear and react.

Features and Benefits:

- Protects your hearing (SNR: 30dB)
- Built in FM-radio receiver
- Level dependent technology for situational awareness
- A separate audio input enables connection to external equipmentsuch as MP3-player or two-way radio
- Also available as helmet attachment

Connects with

- MP3-player



PELTOR™

3M™ PELTOR™ Alert™
M2RX7A2-01 Headband
SNR: 30dB

Other 3M™ PELTOR™ Alert options



3M™ PELTOR™ Alert™
M2RX7P3E2-01 Helmet attachment
SNR: 30dB

- Battery Type:** 2X AA 1.2–1.5 V
- Operating time:** Approximately 70 hours of battery lifetime with included alkaline batteries
- Net Weight (incl. batteries):** 361 g (headband)
390 g (helmet att.)
- Operating temperature:** -20°C to +55°C (battery dependent)
- Wired Connectivity:** 3,5 mm AUX input jack (limited to 82dB(A))

3M™ PELTOR™ Accessories

- HY81 Hygiene kit
HY100A Single-use protectors
1173 SV Battery cover
FL6CE/1 Connection cables for external audio input
M60/2 Wind protection for ambient microphones

Attenuation*

M2RX7A2-01 Headband



Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	16.3	23.5	30.6	35.1	30.7	34.0	33.8
Standard Deviation (dB)	3.0	2.6	2.8	3.1	3.4	2.4	2.8
Assumed Protection (dB)	13.3	20.9	27.8	32.0	27.3	31.6	30.9

SNR=30dB H=29dB. M=28dB. L=21dB

* For further attenuation information please visit www.3M.eu/PPEsafety



3M™ PELTOR™ WS™ Alert™ XP

With the 3M™ PELTOR™ WS™ Alert™ XP Level Dependent FM-Radio Bluetooth® Headset, we introduce a new era in the world of hearing protection. With a built-in FM-radio receiver, Bluetooth® and a level dependent technology for situational awareness, 3M PELTOR WS Alert XP enables users to have wireless telephone conversations or listen to their favorite music even in noisy environments.

Features and Benefits:

- Protects your hearing (SNR: 29dB)
- Built in FM-radio receiver
- Wireless calls and music via Bluetooth®
- Patented speaker system for full-bodied dynamic sound
- Level dependent technology for situational awareness enables you to communicate with your colleagues while maintaining your ability to hear and react on e.g. warnings signals
- External jack (3,5 mm) enables you to connect to external devices via cable
- Fast tuning
- Memory/preset function
- Voice guided menu system
- Also available as helmet attachment
- Possibility to use rechargeable batteries and charge them direct in the headset.

Connects with

- DECT- and mobile phones
- Two-way radio



PELTOR™

3M™ PELTOR™ WS™ Alert™ XP
MRX21AWS5 Headband
SNR: 29dB

Other 3M™ PELTOR™ WS™ Alert™ XP options



3M™ PELTOR™ WS™ Alert™ XP
MRX21P3EWS5 Helmet attachment
SNR: 29dB

Battery Type: 2X AA 1.2–1.5 V

Operating time: Approximately 23 hours of battery lifetime with included alkaline batteries (all functions active)

Net Weight (incl. batteries): 430 g (headband)
455 g (helmet att.)

Operating temperature: -20°C to +55°C (battery dependent)

Wired

Connectivity: 3,5 mm AUX input jack (limited to 82dB(A))

3M™ PELTOR™ Accessories

- HY81 Hygiene kit
- FL6CE/1 Connection cables for external audio input
- LR6NM Rechargeable AA batteries
- FR08 Power supply
- FR09 Battery charger

Attenuation*

MRX21AWS5 Headband



Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	15.5	19.2	28.0	29.6	35.1	34.4	37.1
Standard Deviation (dB)	2.3	1.5	2.1	2.4	2.4	4.0	3.0
Assumed Protection (dB)	13.2	17.7	25.9	27.2	32.7	34.4	34.1

SNR=29dB H=33dB. M=26dB. L=20dB

* For further attenuation information please visit www.3M.eu/PPEsafety



3M™ PELTOR™ LiteCom

With 3M™ PELTOR™ LiteCom communicating in noisy environments has been made easy – and safe. LiteCom is a tough and rugged headset designed to cope with demanding use in many different working environments. The built-in two-way radio has got 8 channels with 38 subchannels, and has a range of up to 3 km. It lets you talk hands-free and work safely regardless of harmful noise levels.

Features and Benefits:

- Protects your hearing (SNR: 32dB)
- Built in two-way radio
- 8 channels in the PMR 446 MHz band
- 38 subchannels
- Range of up to 3 km depending on conditions
- Voice operated transmission (VOX)
- Auto power off function
- Battery status indication
- Voice guided menu system
- Also available as neckband or helmet attachment



Attenuation*

MT53H7A4400-EU Headband



Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	18.1	24.3	32.1	36.2	34.7	39.2	36.0
Standard Deviation (dB)	2.4	1.7	2.2	2.6	3.6	3.3	2.4
Assumed Protection (dB)	15.6	22.6	29.9	33.6	31.1	35.9	33.6

SNR=32dB H=33dB, M=30dB, L=23dB

PELTOR™

3M™ PELTOR™ LiteCom

MT53H7A4400-EU Headband
SNR: 32dB

Other 3M™ PELTOR™ LiteCom options



3M™ PELTOR™ LiteCom
MT53H7B4400-EU
Neckband
SNR: 32dB



3M™ PELTOR™ LiteCom
MT53H7P3E4400-EU
Helmet attachment
SNR: 33dB

Frequency range:

446 MHz (PMR)

Battery Type:

2X AA 1.2–1.5 V batteries or NiMH (2,4 V)

Operating time:

Approximately 20 hours of battery lifetime with included alkaline batteries

Net Weight

(incl. batteries):

394g (headband)
418g (helmet att.)
384g (neckband)

Operating

temperature:

-20°C to +55°C (battery dependent)

3M™ PELTOR™ Accessories

HY79 Hygiene kit
ACK053 Rechargeable battery
FR08 Power supply
FR09 Battery charger
MT53N-12 Electret microphone

* For further attenuation information please visit www.3M.eu/PPEsafety



3M™ PELTOR™ LiteCom Plus

3M™ PELTOR™ LiteCom Plus Electronic Level Dependent Headset with Built-in Two-way Communication Radio and External Audio Input is based on a robust basic design with a number of added features. This is a headset that is designed for demanding use on a daily basis. The built-in two-way radio has 8 or 69 channels with 121 subchannels, and has a range of up to 3 km. It lets you talk hands-free and work safely regardless of harmful noise levels. The level dependent function for ambient listening ensures you are not isolated from your immediate surroundings, but can still hear alarms, unexpected sounds and calls for help.

Features and Benefits:

- Protects your hearing (SNR: 34dB)
- Built in two-way radio communication
- 8 channels in the PMR 446 MHz band or 69 channels in the LPD 433 MHz band
- 121 subchannels
- Range of up to 3 km depending on conditions
- Level dependent function for ambient listening
- Rechargeable lithium-ion battery with 20 hours operating time
- A separate audio input enables connection to external equipment such as mobile phone, two-way radio.
- Voice operated transmission (VOX)
- Auto power off function
- Battery status indication
- Voice guided menu system
- Also available as neckband or helmet attachment

Connects with

- DECT- and mobile phones
- Two-way radio



PELTOR™

3M™ PELTOR™ LiteCom Plus
MT7H7A4410-EU Headband
SNR: 34dB

Other 3M™ PELTOR™ LiteCom Plus options (in blue)



3M™ PELTOR™ LiteCom Plus MT7H7B4410-EU Neckband
SNR: 33dB



3M™ PELTOR™ LiteCom Plus MT7H7P3E4410-EU Helmet attachment
SNR: 33dB

Frequency range: 446 MHz (PMR), 433 MHz (LPD)

Battery Type: 3,7 V Lithium ACK081

Operating time: Approximately 20 hours

Net Weight (incl. batteries): 464g (headband)
491g (helmet att.)
453g (neckband)

Operating temperature: -20°C to +55°C (battery dependent)

3M™ PELTOR™ Accessories

HY79 Hygiene kit
MT7N-02 Dynamic microphone (standard)
ACK081 Battery
AL2AI Charging cable
FR08 Power supply
FL5602 External PTT

Attenuation*

MT7H7A4410-EU Headband



Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	20.2	26.7	35.0	37.4	35.7	40.4	38.9
Standard Deviation (dB)	3.1	3.1	2.6	2.1	3.0	2.9	2.1
Assumed Protection (dB)	17.1	23.6	32.4	35.3	32.7	37.5	36.8

SNR=34dB H=35dB. M=32dB. L=25dB

* For further attenuation information please visit www.3M.eu/PPEsafety



3M™ PELTOR™ WS™ LiteCom

3M™ PELTOR™ WS™ LiteCom with Bluetooth® opens up a world of communication with your built-in two-way radio headset at the hub. You become a mobile, hands-free communication center, the built-in two-way radio and wireless connections to your computer and cell phone. You can take your calls, or stream music thanks to electronics that let you switch easily between functions. The level-dependent technology lets you hear ambient sounds such as external alarm signals or approaching vehicles. It also allows face to face communication at close distance. Robust design, clear controls and an intuitive menu system. This is a headset you will never want to take off.

Features and Benefits:

- Protects your hearing (SNR: 30dB)
- Built in two-way radio communication
- Bluetooth® communication link enables talking wireless in the mobile phone or streaming music
- 8 channels in the PMR 446 MHz band
- 38 subchannels
- Range of up to 3 km depending on conditions
- Level dependent technology for situational awareness
- A separate audio input enables connecting equipment such as mobile phones or external two-way radios.
- Works with rechargeable battery pack or 2x standard AA batteries
- Voice operated transmission (VOX)
- Auto power off function
- Voice guided menu system
- Also available as neckband or helmet attachment

Connects with

- DECT- and mobile phones
- Two-way radio



PELTOR™

3M™ PELTOR™ WS™ LiteCom
MT53H7A4410WS5 Headband
SNR: 30dB

Other 3M™ PELTOR™ WS™ LiteCom options



3M™ PELTOR™ WS™ LiteCom
MT53H7B4410WS5 Neckband
SNR: 31dB



3M™ PELTOR™ WS™ LiteCom
MT53H7P3E4410WS5 Helmet attachment
SNR: 31dB

Frequency range: 446 MHz (PMR)

Bluetooth® Version: 2.1+EDR

Battery Type: Rechargeable battery pack or 2x standard AA batteries

Operating time: Approximately 13 hours

Net Weight (incl. batteries): 462g (headband)
448g (helmet att.)
490g (Neckband)

Operating temperature: -20°C to +55°C (battery dependent)

3M™ PELTOR™ Accessories

- HY79 Hygiene kit
- ACK053 Rechargeable battery
- FR08 Power supply
- FR09 Battery charger
- MT53N-12 Electret microphone

Attenuation*

MT53H7A4410WS5 Headband



Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	14.7	23.4	30.7	34.6	34.5	36.9	37.3
Standard Deviation (dB)	3.9	4.6	3.2	3.4	3.1	2.7	4.2
Assumed Protection (dB)	10.8	18.8	27.4	31.2	31.4	34.2	33.1

SNR=30dB H=33dB, M=27dB, L=19dB

* For further attenuation information please visit www.3M.eu/PPEsafety



Head, Eye & Face Protection



Integrated Head & Face Solutions

3M™ Head and Face Solutions

The 3M brand offers a complete line of safety helmets, face shields, combinations and accessories for anyone exposed to hazardous environments. Our goal is continuous improvement of our products to provide the optimal balance of comfort and safety.



3M™ Uvicator™ Technology for safer working conditions

When a safety helmet is exposed to sunlight the stability of the plastic shell may be adversely affected due to interaction between UV-radiation and the plastic material which may weaken the helmet and compromise safety of the wearer. The adverse effect is dependent not only on the nature of the plastic material but also the intensity of the UV-radiation. All too often damage to the helmet shell may not be visible to the naked eye.

Red, the new sign of safety

The patented Uvicator technology is intended to easily and clearly help show the user when his/her helmet has been over-exposed to UV-radiation and thus when to replace it. This technology is the result of many years of full scale and artificial ageing testing of different material combinations under various sunlight exposure conditions.

As the helmet is exposed to sunlight, the Uvicator indicator is calibrated to detect the amount of UV radiation received and gradually changes colour over time, clockwise, from red to white. When the Uvicator indicator turns completely white, it means that the helmet has received maximum tolerable radiation and therefore needs to be replaced.



Measures exposure to UV radiation



Technically calibrated and tested



Works globally in most environments



Tells you when to replace your helmet



3M™ Safety Helmet G2000 Series

Attractive design and excellent protection! That's the easiest way to summarise the G2000 helmet. The helmet fulfils the requirements for formal testing and is comfortable with its low back and relatively low profile.

It was designed to accommodate additional accessories, such as integrated eyewear, visor and hearing protection.

Features and Benefits:

Ventilation

- For comfort, good ventilation is a must, particularly in warm environments. The G2000 Helmet allows free airflow between the helmet and its harness. Combined with ventilation inlet in the top of the helmet, this helps to increase wearers acceptance

3M™ Uvicator™ Technology

- The disc tells you when it's time to replace your helmet

Optional space for customised print

- A flat surface for printing a logotype, brand name, etc.

Neck protection

- Extended edge on the back of the helmet provides extra coverage for the sensitive neck area

Ratchet headband

- For easier and quicker adjustment

Optimal profile for ear muffs

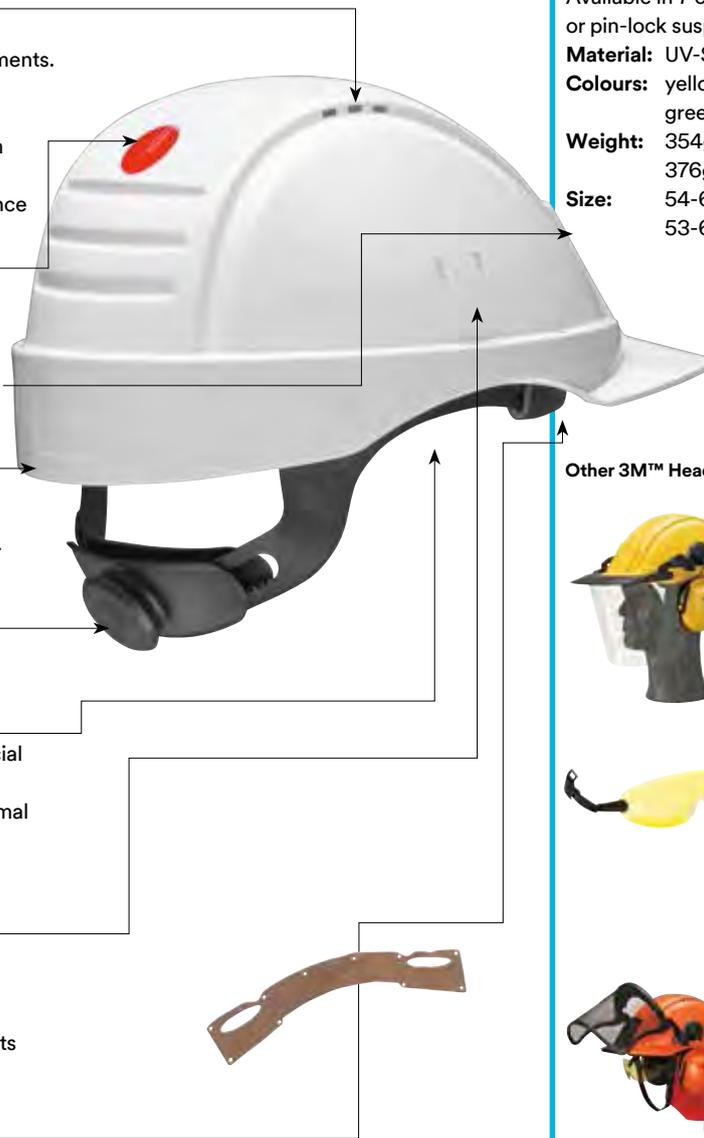
- The G2000 helmet features a special profile design to enable helmet mounted ear muffs to achieve optimal fit and maximum adjustability for individual needs

Attachment point for accessories

- An adjustable snap attachment in the balance point of the helmet to allow simple attachment of accessories, such as muffs, headsets and visors

Sweatband

- Easy to replace for increased comfort and hygiene. Also available in soft leather



3M™ G2000 Series Helmets

Available in 7 colours, with ratchet or pin-lock suspension

Material: UV-Stabilised ABS

Colours: yellow, white, orange, red, blue, green and Hi-Viz

Weight: 354g (pin-lock)
376g (ratchet)

Size: 54-62cm for pin-lock version
53-62cm for ratchet version

Other 3M™ Head Protection Products



3M™ Industrial Helmet Combination

Di-electric combination specially designed for work in electrical environments
Includes: G2001 helmet, H31P3K-01 ear muffs, V4H clear visor.



3M™ Integrated Eyewear

Designed to be used with 3M™ Helmets.

The design allows the glasses to slide easily between the helmet shell and lining. Available in clear, yellow, grey



3M™ Helmet Accessories

A wide range of accessories are available, including sweatbands, chin straps, rain protection, etc...



3M™ Safety Helmet G3000 Series

The G3000 helmet has been developed and designed in close collaboration with industrial and forestry workers. It is intended for use in harsh environments with tough demands

for effective protection. The G3000 has excellent ventilation, good field of vision and is one of few lightweight helmets available on the market today.

Features and Benefits:

3M™ Uvicator™ Sensor

- The disc tells you when it's time to replace your helmet

Ventilation

- Optimised ventilation with lots of ventilation holes

Slim design

- Softly rounded design, which helps to avoid helmet parts snagging on branches etc.

Reversible lining

- Lining that can be rotated 180° allows the helmet to be worn back-to-front which is ideal, for example, when working in tight spaces or climbing

Ratchet headband

- For easier and quicker adjustment

Accessories

- Attachment point for accessories

Sweatband

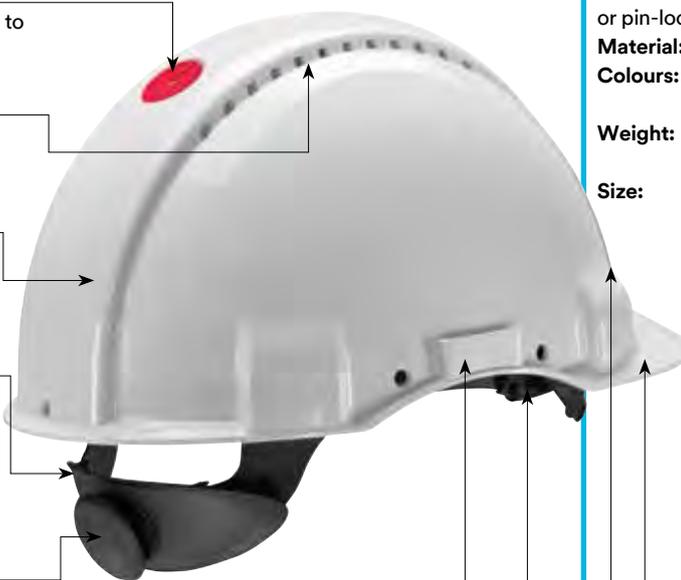
- Easy to replace for increased comfort
Available in plastic or leather

Space for company name

- Surface for printing a logo, brand name, etc.

Short brim

- Short brim giving a broader field of view



3M™ G3000 Series Helmets

Available in 7 colours, with ratchet or pin-lock suspension

Material: UV-stabilised ABS

Colours: yellow, white, orange, red, blue, green and Hi-Viz

Weight: 310g (pin-lock)
334g (ratchet)

Size: 54-62cm for pin-lock version
53-62cm for ratchet version



3M™ Forestry Helmet Combination

Ready-to-use combination for forestry workers
Includes: G3000 helmet, V4CK mesh visor, H31P3E ear muffs, GR3C rain protection

The characteristics of the G3000 helmet are:

Offers excellent protection and approved against EN 397, with the following additional approvals:

- **G3000**
low temperature, -30°C, and molten metal, MM
- **G3001**
(unventilated): low temperature, -30°C, molten metal, MM, and electrical insulation 440Vac,

- **G3001 1000V**
(unventilated): same as G3001 with additional approval according to EN 50365, for electrical insulation at 1000Vac
- **G3000-10**
(with lamp and cord holder) low temperature, -30°C and molten metal, MM



3M™ Safety Helmet H-700 Series

The 3M™ Safety Helmet H-700 is comfortable but tough. Designed with a low profile for improved stability and performance, the H-700 Series is engineered to provide

ultimate full-shift comfort without compromising the protection against small objects striking the top of the hard hat.

Features and Benefits:

Cool wear

- Ventilated headband
- Optional ventilated shell

Ease of Use

- Short brim for better upward visibility and user mobility
- Replaceable sweatband

Internal Accessory slots for:

- 3M™ Helmet Mounted Earmuffs
- 3M™ Helmet Mounted Communication Solutions
- Integrated Eyewear
- Face Shields
- Welding helmets

Suspension

- Comfortable 4 point pin-lock or ratchet suspension with height adjustment or an optional 6 point strap



3M™ Helmet H-700 Vented option

Available in 6 colours with ratchet or pin-lock suspension

EN397:2012 + A1:2012

Very low temperature (-30°C)

3M™ Helmet H-701 Non-vented option

Available in 6 colours with ratchet or pin-lock suspension

EN397:2012 + A1:2012

Very low temperature (-30°C)

Molten metal splash (MM)

Electrical insulation (440 Vac)

Also meet the requirements for low temperature (-50°C) according to ГОСТ P EH 397/A1-2010

Material: high density polyethylene

Colours: yellow, white, orange, red, blue and green

Weight: 356g (pin-lock)
378g (ratchet)

Size: 54-62cm for pin-lock version
53-62cm for ratchet version





3M™ Safety Helmet G3501 Series



Temperature extremes, metal sparks and splashes – that’s the job. And it’s a tough environment to work in. You just can’t afford to compromise the safety and comfort of your workforce.

At 3M we recognise the demanding nature of the work you and your team undertake every day. That’s why we’ve developed a range of completely compatible personal protective equipment (PPE) that can help provide the necessary safety, comfort and compliance in the work environment

Features and Benefits:

- Lightweight and durable helmet meeting a wide range of standard performance requirements
- Electrically insulating in accordance with EN50365 for live-working in low voltage environments
- Approved for use at temperatures ranging from -30°C to +150°C



3M™ Safety Helmet G3501

Available in 6 colours with ratchet or pin-lock suspension

Material: glass fibre reinforced nylon

Colours: yellow, white, orange, red, blue and green

Weight: 369g (pinlock)
392g (ratchet)

Size: 54-62cm for pin-lock version
53-62cm for ratchet version



Select a combination for a complete solution:

3M™ Face Shields



5XG-IR5 Gold/Green visor shade 4-5, medium energy impact (B), Molten Metal Splash (9)



5F-11 Clear visor shade 2C-1.2, medium energy impact (B), liquid splash (3), electric arc (8)



5E-11 Green Image Shade 5, medium energy impact (B), liquid splash (3)



3M™ V6 Integrated Eyewear

The design allows the glasses to slide easily between the head cradle and carrier. Available in clear, yellow and grey

Additional heat protection



NC1-GR Cotton/Para-aramid neck cover for flame resistance and metal splash resistance

FC1-GR Cotton/Para-aramid front cover to protect the helmet from flames and metal splash



NC1-AL Aluminized fabric neck cover offering flame, splash and IR resistance to the wearer’s neck

FC1-AL Aluminized fabric front cover offering flame, splash and IR resistance to the helmet and wearer



Hearing Protection and Communication Headsets

3M PELTOR X Series Earmuffs X4P3E Compatible with a wide range of Earmuffs including the 3M™ PELTOR™ X Series and 3M™ Optime™ Series. A wide range of Communication headsets including 3M™ PELTOR™ LiteCom



3M™ Headgear G500 Series

The 3M™ Headgear G500 is a versatile and comfortable solution for use as a standalone face protection system or for combined face and hearing protection. Special design features make it easy to combine the G500 with other 3M™ Safety Products such as face shields, passive earmuffs or

communication headsets and integrated eyewear. This high quality product provides protection against impacts from the front and side, while special attention at the design stage has ensured maximum visibility and wearer comfort.

Features and Benefits:

Front cover

- Ventilation for increased comfort
- Design incorporates a cable holder for Peltor Communication products

Face Shield

- A wide range of visors and face shields available for many industrial applications
- Offers a wide field of view

Integrated eyewear

- To increase eye protection G500 headgear can incorporate integrated eyewear
- Available in clear, grey and yellow

Ratchet Harness

- Ergonomically designed neck support gives maximum comfort for long periods of time
- 3 height adjustment positions
- 8 head size adjustments

Robustness

- Firm and sturdy for improved product life
- Reduction of flexible materials minimises stress and deformation caused by rough handling
- Ensures consistent attenuation when combined with hearing protection or communication headsets

Hearing Protection

- G500 can be used with or without earmuffs
- 30mm slot fits the Peltor P3E-earmuff attachment



3M™ Industrial Combination G500

- 3M™ Headgear G500
- Clear PC Face Shield 5F-1
- 3M™ Peltor™ Optime™ I Earmuffs



3M™ Forestry Combination G500

- 3M™ Headgear G500
- Stainless Steel Mesh Face Shield 5C-1
- 3M™ Peltor™ Optime™ I Earmuffs

3M™ Integrated Eyewear

Designed to be used with 3M™ Headgear G500. The design allows the glasses to slide easily between the head cradle and carrier. Available in clear, yellow and grey



3M™ Face Shields

The wide range of visors allows for many industrial combinations

Mesh Face Shield 5B/5C-1/5J-1

Available in Polyamide, Stainless steel and Etched metal mesh.
EN1731:2006 Approved



Polycarbonate Face Shield 5F-1/5E-1

Available in clear and Shade 5
EN166:2001 Approved
5F-1: 2C-1.2 3M
1:A(BT):3:8:9:K:N
5E-1: 5 3M 1:BT:3:9:K:N





3M™ Helmet Linkage System V5

The 3M™ Linkage System V5 can be mounted onto the 3M™ Industrial Safety Helmet G22 or G3000 to allow attachment of a range of faceshields. This high quality product provides protection against impacts from the front and side.

Features and Benefits:

Face Shield

- A wide range of visors and faceshields available for many forestry and industrial applications
- Offers a wide field of view
- Designed to attach to helmet via a wide range of 3M™ Peltor™ Earmuffs with helmet adapter
- New 'Snap-in' feature makes it easy to combine the faceshield to the linkage system

Integrated Eyewear

- To increase eye protection the V5 can incorporate integrated eyewear
- Available in clear, grey and yellow

Robustness

- Firm and sturdy for improved product life
- Reduction of flexible materials minimises stress and deformation caused by rough handling
- Ensures consistent attenuation when combined with hearing protection or communication headsets



3M™ Helmet Linkage System



3M™ Forestry Combination
G3000NOR31V5C
3M™ Industrial Safety Helmet G3000
Stainless Steel Mesh Faceshield 5C-1
3M™ Earmuffs H31



Mesh Face Shield
5B/5C-1/5J-1
Available in Polyamide, Stainless steel and Etched metal mesh.
EN1731:2006 Approved

Polycarbonate Face Shield
5F-1/5E-1
Available in clear and Shade 5
EN166:2001 Approved
5F-1: 2C-1.2 3M
1:A(BT):3:8:9:K:N
5E-1: 5 3M 1:BT:3:9:K:N



Protective Eyewear Solutions

The portfolio of 3M™ Eye Protection products promises quality eyewear that provides an optimal balance of comfort, protection and design.

3M's Engineers have worked hard to ensure that the level of comfort and style matches the standard of protection offered. The 3M portfolio offers the highest level of optical class. A broad range of eyewear products include durable anti-scratch and convenient anti-fogcoatings. All products are approved to EN166 and are CE marked.



3M™ Eyewear Fit System

As with all personal protective equipment, comfort is very closely linked with compliance and improperly fitted eyewear may not be enough to prevent eye injuries, so the quality and security of fit is extremely important. Unlike respiratory protection where face fit testing is mandatory, there are no regulatory requirements regarding fitting of eyewear. While current standards suggest careful consideration should be given to eyewear fit, e.g. BS 7029:1999, there is no specific guidance on how to evaluate an individual's fit. Making an assessment based on size and adjustable features is not always adequate to determine best fit and security of eyewear. The innovative 3M™ Eyewear Fit System, is a simple 6 step method* and enables a measured evaluation of fit. This method, utilising the Coverage and Gap gauge tools will help assess 4 elements of protective eyewear fit:

View

Assessment to ensure the wearer can see in all directions of eye rotation without major obstruction to the field of view that would interfere with visibility to perform work tasks.

Coverage

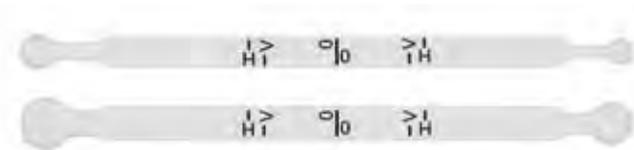
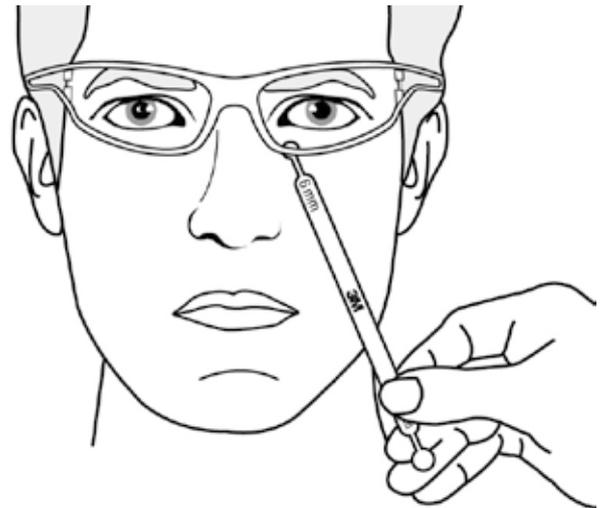
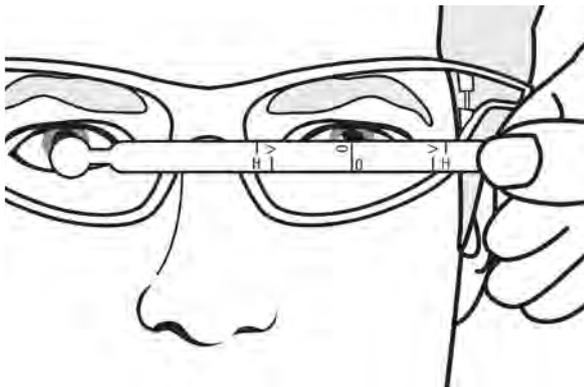
The Coverage gauge assesses how well the safety eyewear covers the soft tissue area around the eyes.

Security

Assessment to ensure the eyewear stays in place on the wearer's head and does not fall off with head movement.

Gaps

The Gap gauges help to identify excessive gaps between the eyewear and the face. Large gaps can provide a clear path for flying debris.



* The full 6 step method is unique to 3M and is available free of charge (Subject to terms and conditions, see website for details). Find out more by contacting your 3M Personal Safety Sales Representative or visit www.3M.eu/eyewear



3M™ Overspectacles 2800 Series

The 3M 2800 Safety Overspectacles are designed to fit over most users' prescription spectacles with minimal interference. They offer an excellent coverage and field of vision, combined with a high level of protection against impacts.

Features and Benefits:

Style

- Versatile design allows use with wide variety of prescription spectacles

Premium Protection

- Optical Class 1 for high optical clarity to allow prolonged, comfortable wear
- Polycarbonate lens offers good impact resistance with Anti-Scratch coating for improved durability

Comfort

- Adjustable length temples (4 positions) for optimal comfort and fit
- Inclinable lens for easy adjustment and maximum comfort
- Soft low profile temples for comfort and minimum interaction with prescription spectacles



3M™ Overspectacles 2805

Lens colour: IR Shade 5

Lens material: polycarbonate



3M™ Overspectacles 2800
Lens colour: clear
Lens material: polycarbonate



3M™ Overspectacles 2801
Lens colour: grey
Lens material: polycarbonate



3M™ Overspectacles 2802
Lens colour: amber
Lens material: polycarbonate



3M™ SecureFit™ Classic Line Spectacles 200 Series

Recognising that lack of comfort and fit are the biggest barriers to protective eyewear use, 3M has introduced a revolutionary range of safety eyewear which self-adjusts to individual head sizes, delivering noticeably higher levels of personal comfort and security of fit. Weighing just 18g, the lightweight eyewear has no moving parts. It simply adjusts to fit a wide array of head sizes, reducing the need to stock

multiple frame sizes. The new 3M™ SecureFit™ Protective Eyewear features patent pending 3M™ Pressure Diffusion Temple Technology which draws on years of scientific anthropometric research by 3M. This game-changing technology allows the frames to naturally adjust to the wearer's profile, providing a snug, stylish and secure fit across a diverse workforce, without compromising safety.

Features and Benefits:

Style

- Sleek, streamline design
- The robust temple design gives great performance and make adjustable features redundant

Premium Protection

- Provides complete impact protection for the orbital region of the eye
- Exceeds the requirements of EN166 clause 7.2.8 Lateral Protection
- Integrated side-shield provides additional protection for surrounding tissues

Comfort

- Features 3M™ Pressure Diffusion Temple Technology
- Constant temple force even with different head sizes
- Reduced frame slippage during workplace head movements
- Self adjusting temples for a secure fit
- Weighs only 18g



3M™ SecureFit™ Classic Line Spectacles SF202AF-EU

Lens colour: grey

Lens material: polycarbonate

Optical Class 1

5C-3.1 lens provides UV protection and glare reduction



3M™ SecureFit™ Classic Line Spectacles SF203AF-EU

Lens colour: amber

Lens material: polycarbonate

Optical Class 1 2C-1.2 lens provides UV protection and good colour recognition and contrast enhancement



3M™ SecureFit™ Classic Line Spectacles SF201AS-EU

Lens colour: clear

Lens material: polycarbonate

Optical Class 1 2C-1.2 lens provides UV protection and good colour recognition



3M™ Classic Line Spectacles 2820 Series

Very lightweight, the 3M 2820 Spectacles are a sleek, modern design offering excellent coverage and field of vision.

Features and Benefits:

Style

- Stylish and modern design, eye protection is more likely to be worn if it looks good

Premium Protection

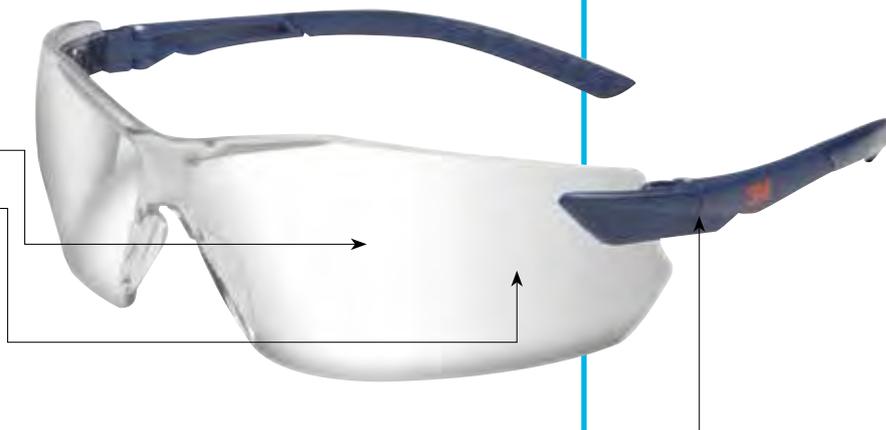
- Optical Class 1 for high optical clarity and extended wear time
- Polycarbonate lens offers good impact resistance
- Wrap-around design for increased lateral protection

Comfort

- Very lightweight 21g
- Inclined lens for easy adjustment and maximum comfort
- Soft, flexible temples for improved comfort

Compatible with

- Fits well with 3M™ Respirators 9300 Series for the majority of users



3M™ Classic Line Spectacles 2820

Colour: clear

Lens material: polycarbonate



3M™ Classic Line Spectacles 2821

Lens colour: grey

Lens material: polycarbonate



3M™ Classic Line Spectacles 2822

Lens colour: amber

Lens material: polycarbonate



3M™ Virtua™ AP Classic Line Spectacles

The new 3M™ Virtua™ AP features a graceful, unisex styling and lightweight comfort to help promote compliance.

Features and Benefits:

Style

- Unisex styling

Premium Protection

- Clear and grey anti-scratch lenses
- Integral side-shields and brow guard
- Polycarbonate lens absorbs 99,9% UV

Comfort

- Comfortable, impact-resistant, lightweight frame - weighs less than 26g



3M™ Virtua™ AP Classic Line Spectacles

Lens colour: clear

Lens material: polycarbonate



3M™ Virtua™ AP Classic Line Spectacles

Lens colour: grey

Lens material: polycarbonate



3M™ Tora™ Classic Line Spectacles

The 3M™ Tora™ Classic Line Spectacles' cool image makes this line of protective eyewear very popular amongst younger members of staff. The 3M Tora™ CCS has a built-in temple groove feature that allows the wearer to attach a corded earplug, keeping both PPE products together.

The optional foam insert features a comfy seal that helps limit eye exposure to nuisance dust. The insert can be easily removed for cleaning or alternate wearing configurations.

Features and Benefits:

Style

- Stylish and modern design, eye protection is more likely to be worn if it looks good
- The 3M™ Tora™ CCS Spectacles feature blue temples to intensify the contemporary smart look

Premium Protection

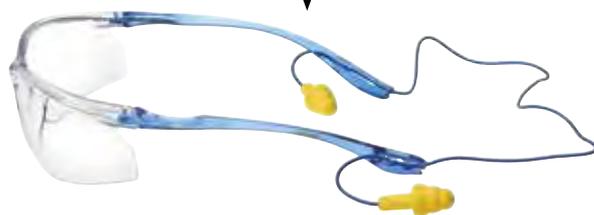
- Excellent peripheral vision and lateral side protection
- Good impact resistance with Anti-Scratch coating for improved durability
- Anti-Fog coating which reduces fogging and ensures clearer vision
- Designed to keep eyewear and earplugs attached, untangled and ready to use
- Can help reduce the expense of replacing lost earplugs and eyewear

Comfort

- Lightweight and comfortable

Compatible with

- Slim nose bridge and flat temples for improved compatibility with other PPE
- Compatible with a variety of 3M™ E-A-R™ corded earplugs
- Earplug cord can be worn around the neck to carry eyewear when neither product is in use



3M™ Tora™ CCS Classic Line Spectacles

Lens colour: clear

Lens material: polycarbonate



3M™ Tora™ CCS Classic Line Spectacles with foam insert



3M™ Tora™
Classic Line Spectacles
Lens colour: clear
Lens material: polycarbonate



3M™ Tora™
Classic Line Spectacles
Lens colour: amber
Lens material: polycarbonate



3M™ Tora™
Classic Line Spectacles
Lens colour: bronze
Lens material: polycarbonate



3M™ SecureFit™ Comfort Line Spectacles



Sourcing eyewear to securely fit a diverse workforce can be a challenge. 3M Pressure Diffusion Temple Technology enhances fit as temples naturally adjust to individual head sizes. This can result in enhanced comfort due to less pressure over the ears without compromising security of fit.

This lightweight eyewear weighs just 19g and offers improved features for comfort and style, combatting two of the largest barriers to compliance.

Features and Benefits:

Style

- Sleek, streamline design
- The robust temple design gives great performance and make adjustable features redundant
- Motion inspired, contoured piping in a bold, modern colour palette for an added infusion of style

Premium Protection

- Provides complete impact protection for the orbital region of the eye
- Exceeds the requirements of EN166 clause 7.2.8 Lateral Protection
- Integrated side-shield provides additional protection for surrounding tissues
- Polycarbonate lenses absorb 99.9% of UVA and UVB and meet the requirements of EN166:2001

Comfort

- Features 3M™ Pressure Diffusion Temple Technology
- Constant temple force even with different head sizes
- Reduced frame slippage during workplace head movements
- Self adjusting temples for a secure fit
- Weighs only 19g
- Dual-injected padded temple touchpoints for added comfort over the ears
- Soft, adjustable nosepads for even greater personalisation of fit



3M™ SecureFit™ Comfort Line Spectacles SF402AF-EU
Colour: grey
Lens material: polycarbonate
 Optical Class 1
 5C-3.1 lens provides UV protection and glare reduction



3M™ SecureFit™ Comfort Line Spectacles SF403AF-EU
Lens colour: amber
Lens material: polycarbonate
 Optical Class 1
 2C-1.2 lens provides UV protection and good colour recognition and contrast enhancement



3M™ SecureFit™ Comfort Line Spectacles SF401AF-EU
Lens colour: clear
Lens material: polycarbonate
 Optical Class 1
 2C-1.2 lens provides UV protection and good colour recognition



3M™ SecureFit™ Comfort Line Spectacles SF408AS-EU
Lens colour: Blue Mirror
Lens material: polycarbonate
 Optical Class 1.5-3.1 lens provides UV protection and glare reduction



3M™ SecureFit™ Comfort Line Spectacles SF410AS-EU
Lens colour: indoor/outdoor
Lens material: polycarbonate
 Optical Class 1
 5-1.7 lens provides UV protection and good colour recognition



3M™ Comfort Line Spectacles 2840 Series

Protection, comfort and adjustability. With a unique style, the 2840 spectacles have been designed with user comfort and convenience in mind. The temples are fully inclinable and adjustable in length for optimal fit. The soft inner padding offers increased comfort. The 3M™ Spectacles 2840 also feature an integrated browguard for increased

protection incorporating a strong polycarbonate lens with anti-scratch and anti-fog coating (except 3M™ Spectacles 2844), they are available in 6 lens options.

Features and Benefits:

Style

- Stylish and modern design, eye protection is more likely to be worn if it looks good

Premium Protection

- Optical Class 1 to allow prolonged, comfortable wear
- Integrated browguard for increased protection
- Strong polycarbonate lens with anti-scratch and anti-fog coating
- Polycarbonate lens for good impact protection

Comfort

- Adjustable temple length (3 positions) for comfort and optimal fit
- Soft inner padding on temple for increased comfort and stability when worn
- Inclinable lens enabling individual adjustment and optimal personal fit
- Lightweight (26g)

Compatible with

- Ideal combination with 3M™ Respirators 9300 Series and 4000 Series and the 3M™ Half Masks 7500 Series



3M™ Comfort Line Spectacles 2840

Lens colour: clear

Lens material: polycarbonate



3M™ SecureFit™

Comfort Line Spectacles 2841

Lens colour: grey

Lens material: polycarbonate



3M™ SecureFit™

Comfort Line Spectacles 2842

Lens colour: amber

Lens material: polycarbonate



3M™ SecureFit™

Comfort Line Spectacles 2844

Lens colour: Indoor Outdoor Mirror

Lens material: polycarbonate



3M™ SecureFit™
Comfort Line Spectacles 2846

Lens colour: red-orange

Lens material: polycarbonate



3M™ SecureFit™
Comfort Line Spectacles 2845

Lens colour: IR shade 5

Lens material: polycarbonate



3M™ Solus™ Comfort Line Spectacles

Solus Comfort Line Spectacles combine a modern design and an optimal dual technology, with the soft inner padding of the temple, leading to increased comfort and protection, without optical distortion.

Features and Benefits:

Style

- Stylish and modern design, eye protection is more likely to be worn if it looks good
- With colour accented soft temple components, Solus brings sophistication and comfort to safety eyewear

Premium Protection

- Strong PC lenses with anti-scratch and anti-fog coating
- Wrap-around lens provides excellent lateral protection

Comfort

- Lightweight (23g)
- Soft inner padding on temple for increased comfort and stability when worn

Compatible with

- Specially designed for improved compatibility with other PPE



3M™ Solus™ Comfort Line Spectacles

Colour: amber

Lens material: polycarbonate



3M™ Solus™ Comfort Line Spectacles

Lens colour: red mirror

Lens material: polycarbonate



3M™ Solus™ Comfort Line Spectacles

Lens colour: bronze

Lens material: polycarbonate



3M™ Solus™ Comfort Line Spectacles

Lens colour: I/O (indoor/outdoor)

Lens material: polycarbonate



3M™ Solus™ Comfort Line Spectacles

Lens colour: not I/O (indoor/outdoor)

Lens material: polycarbonate



3M™ Maxim™ Comfort Line Spectacles

Protection, comfort, and adjustability, Maxim comfort line spectacles, all have a unique patented aspherical lens which provides excellent coverage and a wide angle of vision. The temples are fully inclinable and adjustable in length for optimal fit. They are available in more than 15 different lens and frame options.

The unique minimizer option for welding assistance protects against Infra-red without blocking visible light.

Features and Benefits:

Style

- Stylish and modern design

Premium Protection

- Patented aspherical lens for excellent coverage and field of view
- Ventilation channel across the lens to minimise misting

Comfort

- Soft, adjustable nosebridge
- Dual-injected cushion browguard for extra comfort and shock absorbion
- Adjustable length temples with pantoscopic system

Compatible with

- Ballistic version is specially designed for improved compatibility with other PPE e.g. with 3M™ Peltor™ Earmuffs X Series



3M™ Maxim™ Premium Line Spectacles

Lens colour: clear

Lens material: polycarbonate



3M™ Maxim™ Welding Premium Line Spectacles

Lens colour: shade 5.0

Lens material: polycarbonate



3M™ Maxim™ Ballistic Premium Line Spectacles

Lens colour: bronze

Lens material: polycarbonate



3M™ Maxim™ Ballistic Premium Line Spectacles

Lens colour: amber

Lens material: polycarbonate



3M™ Maxim™ Ballistic Premium Line Spectacles

Lens colour: clear

Lens material: polycarbonate



3M™ Maxim™ Utility Pack

Lens colour: clear, bronze and amber

Lens material: polycarbonate



3M™ Maxim™ Ballistic Premium Line Spectacles

Band



3M™ Marcus Grönholm Premium Line Spectacles

Protection, comfort, and stylish design. Marcus Grönholm premium line spectacles combine attractive and modern styling with wraparound design. The strong metal frame provides a comfortable fit.

Features and Benefits:

Style

- Stylish and modern design, eye protection is more likely to be worn if it looks good
- Wrap-around design
- Bronze and blue mirror lenses are available

Premium Protection

- High curve lenses provide optimal field of view
- Excellent UV protection, ideal for sunny environments
- Strong polycarbonate lens with anti-scratch and anti-fog coating

Comfort

- Spring hinges for robustness and soft temple tips for extra comfort
- Adjustable nose grips provide a comfortable fit

Compatible with

- Slim nose bridge and flat temples for improved compatibility with other PPE
- Ideal combination with 3M™ Respirators 9300 Series and 4000 Series and the 3M™ Half Masks 7500 Series



3M™ Marcus Grönholm Premium Line Spectacles

Colour: blue Mirror

Lens material: polycarbonate



3M™ Marcus Grönholm Premium Line Spectacles
Lens colour: bronze
Lens material: polycarbonate



3M™ Marcus Grönholm Premium Line Spectacles
Lens colour: clear
Lens material: polycarbonate



3M™ Refine 300 Premium Line Spectacles

Better Style means better compliance

Women don't have to settle for bulky, oversized eyewear anymore. The 3M™ Refine 300 Safety Eyewear is specially sized for smaller heads and profiles.

The result is excellent coverage with fewer gaps where dangerous particulates or flying debris can damage the eyes. Appealing, well-fitting design will lead to increased wearer acceptance.

Features and Benefits:

Style

- Slim frame design
- Clear and bronze anti-fog and anti-scratch lenses

Premium Protection

- Strong polycarbonate lens with anti-scratch and anti-fog coating
- Integrated side protection
- Meets the low energy impact requirements of EN 166

Comfort

- Specific slim design that fits smaller faces
- Adjustable soft nose pads to improve comfort

Compatible with

- Compatible with 3M's respiratory protection range



3M™ Refine 300 Premium Line Spectacles

Lens colour: mocha

Lens material: polycarbonate



3M™ Refine 300 Premium Line Spectacles

Lens colour: clear

Lens material: polycarbonate



3M™ Premium Line Spectacles 1100E / 1200E Series

Introducing safety eyewear that combines the edgy styling and solid performance that workers crave. Upgrade your safety compliance with the 1100E and 1200E Series.

With inspired designs and a solid frame construction, the new 1100E and 1200E styles deliver the looks, attitude and brand that workers want to wear.

Features and Benefits:

Style

- Stylish and modern design, delivers the looks attitude and brand that workers want to wear
- Available with clear or grey lens

Premium Protection

- Polycarbonate lenses absorb 99.9% UV radiation
- Frame made from a high density nylon material for robust protection
- Strong polycarbonate lens with anti-scratch and anti-fog coating
- Each pair comes with a micro-fibre pouch

Comfort

- Lightweight half frame assures a comfortable fit
- Soft adjustable nosepiece

Compatible with

- Low profile nose-bridge provides increased compatibility with 3M respirators



3M™ Premium Line Spectacles 1200E

Colour: grey or clear

Lens material: polycarbonate



3M™ Premium Line Spectacles 1200E

Lens colour: clear

Lens material: polycarbonate



3M™ Premium Line Spectacles 1100E

Lens colour: clear

Lens material: polycarbonate
Features wrap around frame and wide temples with integrated side protection.



3M™ Premium Line Spectacles 1100E

Lens colour: grey

Lens material: polycarbonate
Features wrap around frame and wide temples with integrated side protection.



3M™ Fuel™ X2 Premium Line Spectacles

Pump up your safety compliance levels with some of the best looking protective eyewear on the market. The Fuel X2 Series – where compliance meets style.

An ultra efficient blend of comfort and style, Fuel X2 offers a refined look and superb features. The revolutionary frame

design features bold new grooved styling, rubber over-moulded adjustable temples and a fully adjustable nose-bridge. The sleek frame profile and rimless lower lenses help ensure that protection and performance remain uncompromised.

Features and Benefits:

Style

- Rubber over-moulded adjustable temples
- Half frame design
- Each pair comes with a microfibre pouch

Premium Protection

- Polycarbonate lenses absorb 99.9% UV radiation
- Meets the low energy impact requirements of EN166
- Frame made from a high density nylon material for impact, torsion and heat resistance
- Special mirror coating provides glare reduction and UV protection
- Strong polycarbonate lens with anti-scratch and anti-fog coating

Comfort

- Adjustable temple arms
- Soft adjustable nose bridge

Compatible with

- Compatible with other 3M PPE products



3M™ Fuel™ X2 Premium Line Spectacles

Lens colour: red mirror

Lens material: polycarbonate



3M™ Fuel™ X2 Premium Line Spectacles

Lens colour: bronze

Lens material: polycarbonate



3M™ Fuel™ X2 Premium Line Spectacles

Lens colour: clear

Lens material: polycarbonate



3M™ BX™ Premium Line Spectacles

The sleek, contoured and fully adjustable BX model is designed for today's flexible work force. Also available with bi-focal lenses which provide magnification for reading or precision work.

Features and Benefits:

Style

- Stylish and modern design

Premium Protection

- Anti-Fog coating reduces fogging and ensures clearer vision
- Excellent protection against flying particles

Comfort

- Soft tip temples to improve comfort
- Soft, universal-fit nose bridge
- Adjustable length temples with pantoscopic system (3 angles for custom fit)

Compatible with

- Special design for improved compatibility with other PPE



3M™ BX™ Premium Line Spectacles

Colour: clear

Lens material: polycarbonate



3M™ BX™ Premium Line Spectacles

Lens colour: grey

Lens material: polycarbonate



3M™ BX™ Readers Premium Line Spectacles

Lens colour: clear

Lens material: polycarbonate

3 focal strengths available:

+1.5, +2.0 and +2.5



3M™ LED Light Vision™ Premium Line Spectacles

The 3M™ LED Light Vision™ Premium Line Spectacles will allow you to light a dark zone while protecting your eyes and having hands-free for working.

This new innovation opens new horizons for safety: electrical work, car repair, DIY, mechanical work in dark environments, night time reading.

Features and Benefits:

Style

- Modern and stylish design

Premium Protection

- This safety spectacle is equipped with an adjustable ultra-bright LED with long battery life
- The polycarbonate anti-fog lens protects against UV and low energy impact at extreme temperatures

Comfort

- The frame has rubber temples and rubber nose pads for extra-comfort

Compatible with

- Provides excellent fit with a variety of other 3M PPE



3M™ LED Light Vision™ Premium Line Spectacles

Lens colour: clear

Lens material: polycarbonate



3M™ Headlights

Separate headlights compatible with all 3M™ spectacles.



NEW

3M™ Solus™ 1000 Series with 3M™ Scotchgard™ Anti-Fog Coating

A fogged lens can be frustrating and dangerous. Removing eyewear to wipe away fog can expose eyes to potentially dangerous workplace impact hazards and debris. The Scotchgard™ Anti-Fog Coating resists fogging longer than traditional anti-fog coatings, even after washing multiple times. Try the Solus™ 1000 Series with Scotchgard™ Anti-Fog Coating and see clearly, longer.

Features and Benefits:

Style

- Slim frame
- Colour accented soft temple components for a stylish and modern look

Premium Protection

- Strong PC lenses

3M™ Scotchgard™ Anti-Fog Coating

- Provides scratch resistance and durability
- Provides superior anti-fog and anti-scratch properties, complying with K & N marking requirements of EN166
- Can be disinfected with diluted bleach soaking or alcohol wipes without losing its anti-fog performance

Comfort

- Lightweight
- Soft cushioning on nose bridge
- Inner padding on temples for increased comfort and stability when worn



3M™ Solus™ 1201

Lens colour: clear

Also available in: 3M™ Solus™ 1202 grey
3M™ Solus™ 1203 amber

Lens material: polycarbonate

Frame colour: green/black



3M™ Solus™ 1101

Lens colour: clear

Also available in:
3M™ Solus™ 1102 grey
3M™ Solus™ 1103 amber

Lens material: polycarbonate

Frame Colour: blue/black



3M™ Solus™ 1101 Kit



3M™ Solus™ 1201 Kit

Kits available with clear lens in each frame type. These include a headband and foam insert.



NEW

3M™ Goggle Gear 500 Series with 3M™ Scotchgard™ Anti-Fog Coating

3M™ Goggle Gear 501 has a low profile design, an adjustable headband and optional prescription insert. The goggle is available with a Scotchgard™ Anti-Fog coating which resists fogging longer than traditional anti-fog coatings.

Features and Benefits:

Style

- Modern, slim-line and lightweight design for an excellent fit

Premium Protection

- Optical class 1 lens suitable for prolonged use
- Coating retains its effectiveness even after multiple washings
- Offers excellent protection against UV radiation
- Designed to be worn with 3M Goggle Gear prescription inserts

3M™ Scotchgard™ Anti-Fog Coating

- Provides scratch resistance and durability
- Provides superior anti-fog and anti-scratch properties, complying with K & N marking requirements of EN166
- Can be disinfected with diluted bleach soaking or alcohol wipes without losing its anti-fog performance

Comfort

- Easy-to-adjust elastic Nylon headband for stable and comfortable wear
- Pivoting ratchet for convenient personal adjustment

3M™ Goggle Gear Protective Eyewear 500

Lens colour: clear

Lens material: polycarbonate



Prescription insert

Lens colour: clear

Lens material: polycarbonate



3M™ Maxim™ Hybrid Goggles

The 3M™ Maxim™ Hybrid goggle is a very lightweight, low profile form of eyewear protection that provides the same protection as traditionally styled goggles. It provides high comfort and unsurpassed protection against liquid droplets

and mechanical hazards. The slim design offers improved comfort and wearer acceptance.

Features and Benefits:

Style

- Modern and slim design

Premium Protection

- Patented aspherical lens for excellent field of view and superior eye coverage
- High performance ventilation system

Compatible with

- Special design for improved compatibility with other PPE

3M™ Maxim™ Hybrid Goggles

Colour: clear

Lens material: polycarbonate





3M™ Comfort Line Safety Goggles 2890 Series

The 3M™ Comfort Line Safety Goggles 2890 Series feature a modern, slim design and are available with four different options using either an acetate or polycarbonate lens with either sealed or indirect ventilation. They are suitable for a number of different applications where a versatile, comfortable goggle is required.

Features and Benefits:

Style

- Modern, slim-line and lightweight design for an excellent fit

Premium Protection

- Sealed design (3M™ 2890S & 3M™ 2890SA) helps provide protection against liquids, dust, gases and vapours
- Indirect ventilation design (3M™ 2890 & 3M™ 2890A) for improved air circulation, comfort and reduced fogging in hot/humid conditions
- Acetate lens option (2890A & 2890SA) for excellent chemical resistance and protection against high speed particles at low energy EN166 1 FT
- Polycarbonate lens option (2890 & 2890S) protects against high speed particles at medium energy EN166 1 BT and molten metal
- Anti-Scratch features an extremely scratch resistant coating ensuring improved durability (2890 & 2890S only)
- Anti-Fog coating reduces fogging and ensures clearer vision
- UV Protection gives reliable protection against specified levels of hazardous UV radiation
- The 2895S lenses are assessed against EN169:2002 for transmittance requirement for welding filters. This product protects against high speed impact at medium energy at room temperature only

Comfort

- Easy-to-adjust strap for stable and comfortable wear
- Pivoting ratchet for convenient personal adjustment
- Replacement lens options for 2890/2890S 2890A/2890SA

Compatible with

- Ideal combination with 3M™ Respirators 9300 Series and 4000 Series and the 3M™ Half Masks 7500 Series

3M™ Goggles 2890

Lens colour: clear

Lens material: polycarbonate



3M™ Goggles 2890A

Acetate lens

3M™ Goggles 2890S

Sealed polycarbonate lens

3M™ Goggles 2890SA

Sealed acetate lens



3M™ Safety Goggles 2895S

Sealed polycarbonate lens
Features shade 5 lens for welding and cutting



3M™ Fahrenheit™ Comfort Goggles

The Fahrenheit comfort goggle features a modern, slim design and is available with an acetate or polycarbonate lens with either sealed or indirect ventilation. It is suitable for a number of different applications where a versatile, comfortable goggles is required.

Features and Benefits:

Style

- Modern, slim-line and lightweight design for an excellent fit

Premium Protection

- Aerodynamic shape with cylindrical lens for excellent field of vision
- Indirect ventilation system to prevent fog, liquids and dust (on selected models)

Comfort

- Wide nylon elastic strap (25mm) which is easily adjustable thanks to a buckle system and to a pivoting strap attachment mechanism
- A Neoprene headband, easy to clean, specially for the food industry (on selected models)

Compatible with

- Special helmet version is compatible with Peltor™ Helmet G3000



3M™ Fahrenheit™ Comfort Goggle

Colour: clear

Lens material: polycarbonate



3M™ Fahrenheit™ for Peltor™ Helmet

Lens colour: clear

Lens material: acetate



3M™ Fahrenheit™ T-N-Wear

Lens colour: clear

Lens material: acetate

3M™ Eyewear	Lens Type	Impact Protection	Coating	Lens Filter and Shading	Visual Light Lens Transmittance	EN166 Lens Marking	Specialised field of use (see User Instructions)
Over Spectacles							
3M™ 2800	PC Clear	FT	AS	2C-1.2	88%	2C-1.2 3M 1 FT	
3M™ 2801	PC Grey	FT	AS	5-3.1	86%	5-3.1 3M 1 FT	
3M™ 2802	PC Amber	FT	AS	2-1.2	83%	2-1.2 3M 1 FT	
3M™ 2805	PC Welding	FT	AS	4-5	2%	4-5 3M 1 FT	
Spectacles							
3M™ SecureFit™ 200	PC Clear	FT	AS	2C-1.2	91%	2C-1.2 3M 1 FT	
3M™ SecureFit™ 200	PC Clear	FT	AS/AF	2C-1.2	91%	2C-1.2 3M 1 FT	
3M™ SecureFit™ 200	PC Amber	FT	AS/AF	2C-1.2	90%	2C-1.2 3M 1 FT	
3M™ SecureFit™ 200	PC Grey	FT	AS/AF	5-3.1	13%	5-3.1 3M 1 FT	
3M™ SecureFit™ 400	PC Clear	FT	AS/AF	2C-1.2	91%	2C-1.2 3M 1 FT	
3M™ SecureFit™ 400	PC Amber	FT	AS/AF	2C-1.2	90%	2C-1.2 3M 1 FT	
3M™ SecureFit™ 400	PC Grey	FT	AS/AF	5-3.1	13%	5-3.1 3M 1 FT	
3M™ SecureFit™ 400	PC Indoor/Outdoor	FT	AS/AF	5-1.7	54%	5-1.7 3M 1 FT	
3M™ SecureFit™ 400	PC Blue Mirror	FT	AS/AF	5-3.1	14%	5-3.1 3M 1 FT	
3M™ 2820	PC Clear	FT	AS/AF	2C-1.2	87%	2C-1.2 3M 1 FT	
3M™ 2821	PC Amber	FT	AS/AF	2-1.2	23%	2-1.2 3M 1 FT	
3M™ 2822	PC Grey	FT	AS/AF	5-2.5	82%	5-2.5 3M 1 FT	
3M™ Virtua™ AP	PC Clear	FT	AS	2C-1.2	90%	2C-1.2 3M 1 FT	
3M™ Virtua™ AP	PC Grey	FT	AS	5-2.5	21%	5-2.5 3M 1 FT	
3M™ Tora™	PC Clear	FT	AS/AF	2C-1.2	90%	2C-1.2 3M 1 FT	
3M™ Tora™	PC Amber	FT	AS/AF	2C-1.2	27%	2C-1.2 3M 1 FT	
3M™ Tora™	PC Bronze	FT	AS/AF	5-2.5	86%	5-2.5 3M 1 FT	
3M™ Tora™ CCS	PC Clear	FT	AS/AF	2C-1.2	90%	2C-1.2 3M 1 FT	Hearing
3M™ 2840	PC Clear	FT	AS/AF	2C-1.2	88%	2C-1.2 3M 1 FT	
3M™ 2841	PC Grey	FT	AS/AF	5-2.5	23%	5-2.5 3M 1 FT	
3M™ 2842	PC Amber	FT	AS/AF	2-1.2	83%	2-1.2 3M 1 FT	
3M™ 2844	PC Indoor/Outdoor	FT	Mirror	5-1.7	49%	5-1.7 3M 1 FT	
3M™ 2845	PC Shade 5	FT	AS/AF	5	2%	5 3M 1 FT	
3M™ 2846	PC Red-Orange	FT	AS/AF	2-1.7	47%	2-1.7 3M 1 FT	
3M™ Solus™	PC Clear	FT	AS/AF	2C-1.2	89%	2C-1.2 3M 1 FT	
3M™ Solus™	PC Amber	FT	AS/AF	2C-1.2	87%	2C-1.2 3M 1 FT	
3M™ Solus™	PC Bronze	FT	AS/AF	5-3.1	12%	5-3.1 3M 1 FT	
3M™ Solus™	PC Indoor/Outdoor	FT	Mirror	5-1.7	54%	5-1.7 3M 1 FT	
3M™ Solus™	PC Red Mirror	FT	Mirror	5-3.1	15%	5-3.1 3M 1 FT	
3M™ Maxim™	PC Clear	FT	AS/AF	2C-1.2	88%	2C-1.2 3M 1 FT K N	
3M™ Maxim™ Welding	PC Shade 5	FT	AS/AF	5	2%	5 3M 1 FT K N	
3M™ Maxim™ Ballistic	PC Clear	FT	AS/AF	2C-1.2	88%	2C-1.2 3M 1 FT K N	
3M™ Maxim™ Ballistic	PC Amber	FT	AS/AF	2C-1.2	88%	2C-1.2 3M 1 FT K N	
3M™ Maxim™ Ballistic	PC Bronze	FT	AS/AF	5-3.1	14%	5-3.1 3M 1 FT K N	
3M™ Marcus Grönholm	PC Clear	FT	AS/AF	2C-1.2	90%	2C-1.2 3M 1 F	
3M™ Marcus Grönholm	PC Bronze	FT	AS/AF	5-3.1	14%	5-3.1 3M 1 F	
3M™ Marcus Grönholm	PC Blue Mirror	FT	Mirror	5-3.1	14%	5-3.1 3M 1 F	
3M™ Refine 300	PC Clear	FT	AS/AF	2C-1.2	90%	2C-1.2 3M 1 FT	
3M™ Refine 300	PC Mocha	FT	AS/AF	5-3.1	17%	5-3.1 3M 1 FT	
3M™ Solus 1000	PC Clear	FT	AS/AF	2C-1.2	91%	2C-1.2 3M 1 FT KN	
3M™ Solus 1000	PC Grey	FT	AS/AF	5-3.1	14%	5-3.1 3M 1 FT KN	
3M™ Solus 1000	PC Amber	FT	AS/AF	2C-1.2	89%	2C-1.2 3M 1 FT KN	
3M™ Fuel™ X2	PC Clear	FT	AS/AF	2C-1.2	90%	2C-1.2 3M 1 FT	
3M™ Fuel™ X2	PC Bronze	FT	AS/AF	5-3.1	9%	5-3.1 3M 1 FT	
3M™ Fuel™ X2	PC Red Mirror	FT	Mirror	5-3.1	15%	5-3.1 3M 1 FT	
3M™ BX™	PC Clear	FT	AS/AF	2C-1.2	90%	2C-1.2 3M 1 FT	
3M™ BX™	PC Grey	FT	AS/AF	5-3.1	9%	5-3.1 3M 1 FT	
3M™ BX™ Readers	PC Clear	FT	AS/AF	2C-1.2	90%	2C-1.2 3M 1 FT, +1.50	
3M™ LED Light Vision™	PC Clear	FT	AS/AF	2C-1.2	86%	2C-1.2 3M 1 FT	
Goggles							
3M™ Maxim™ Hybrid	PC Clear	FT	AS/AF	NA	88%	3M 1 FT K N	3
3M™ 2890	PC Clear	BT	AS/AF	2C-1.2	88%	2C-1.2 3M 1 K N BT 9	3,4,9
3M™ 2890A	Acetate Clear	FT	AF	2C-1.2	84%	2C-1.2 3M 1 N FT	3,4
3M™ 2890S	Sealed PC Clear	BT	AS/AF	2C-1.2	88%	2C-1.2 3M 1 K N BT 9	3,4,5,9
3M™ 2890SA	Sealed Acetate Clear	FT	AF	2C-1.2	84%	2C-1.2 3M 1 N FT	3,4,5
3M™ 2895S	Sealed PC Shade 5	BT	AS/AF	5	2%	5 3M 1 B K N	3,4,5,9
3M™ Goggle Gear 500	PC Clear	BT	AS/AF	2C-1.2	89%	2C-1.2 3M 1 BT KN	3,4

*Visual Lens Light Transmittance percentages quoted are typical values as results may vary

1 - MECHANICAL WORK

Grinding, drilling, stone cutting, maintenance
RISKS: Impact, dust (Goggles only)

2 - OUTSIDE WORK

Gardening, road works, building site work, shooting
RISKS: Impact, glare, UV

3 - DRIVER

Fork lift truck, heavy plant, HGV, PSV
RISKS: Glare, UV

4 - CHEMICAL APPLICATION

Laboratory, painting, general surgery
RISKS: Liquid splash (acid, alkalis), infected blood

Mechanical work	Outside Work	Driver	Chemical Application	Metallurgy	Surface Inspection	Welding	3M™ Eyewear
							Over Spectacles
y				y			3M™ 2800 (Clear)
y	y	y					3M™ 2801 (Grey)
y					y		3M™ 2802 (Amber)
				y		y	3M™ 2805 (Welding)
							Spectacles
y				y			3M™ SecureFit™ (Clear)
y				y			3M™ SecureFit™ (Clear)
y					y		3M™ SecureFit™ (Amber)
y	y	y					3M™ SecureFit™ (Grey)
y				y			3M™ SecureFit™ (Clear)
y					y		3M™ SecureFit™ (Amber)
y	y	y					3M™ SecureFit™ (Grey)
	y	y					3M™ SecureFit™ (Indoor/Outdoor)
y		y					3M™ SecureFit™ (Blue Mirror)
y				y			3M™ 2820 (Clear)
y		y			y		3M™ 2821 (Amber)
	y	y					3M™ 2822 (Grey)
y				y			3M™ Virtua™ AP (Clear)
	y	y					3M™ Virtua™ AP (Grey)
y				y			3M™ Tora™ (Clear)
y		y			y		3M™ Tora™ (Amber)
y	y	y					3M™ Tora™ (Bronze)
y				y			3M™ Tora™ CCS (Clear)
y				y			3M™ 2840 (Clear)
	y	y					3M™ 2841 (Grey)
y		y			y		3M™ 2842 (Amber)
	y	y					3M™ 2844 (Indoor/Outdoor)
				y		y	3M™ 2845 (Shade 5)
y					y		3M™ 2846 (Red-Orange)
y				y			3M™ Solus™ (Clear)
		y			y		3M™ Solus™ (Amber)
	y	y					3M™ Solus™ (Bronze)
	y	y					3M™ Solus™ (Indoor/Outdoor)
	y						3M™ Solus™ (Red Mirror)
y				y			3M™ Maxim™ (Clear)
				y		y	3M™ Maxim™ Welding (Shade 5)
y							3M™ Maxim™ Ballistic (Clear)
y		y			y		3M™ Maxim™ Ballistic (Amber)
y	y	y					3M™ Maxim™ Ballistic (Bronze)
y		y					3M™ Marcus Grönholm (Clear)
y	y	y					3M™ Marcus Grönholm (Bronze)
y		y					3M™ Marcus Grönholm (Blue Mirror)
y				y			3M™ Refine 300 (Clear)
	y	y					3M™ Refine 300 (Mocha)
y				y			3M™ Solus 1000 (Clear)
y	y	y					3M™ Solus 1000 (Grey)
y				y			3M™ Solus 1000 (Amber)
y							3M™ Fuel™ X2 (Clear)
y	y	y					3M™ Fuel™ X2 (Bronze)
y	y						3M™ Fuel™ X2 (Red Mirror)
y				y			3M™ BX™ (Clear)
	y						3M™ BX™ (Grey)
y				y			3M™ BX™ Readers (Clear)
y							3M™ LED Light Vision™ (Clear)
							Goggles
y							3M™ Maxim™ Hybrid (Clear)
y							3M™ 2890 (Clear)
			y	y			3M™ 2890A (Clear)
y							3M™ 2890S (Clear)
			y	y			3M™ 2890SA (Clear)
y				y		y	3M™ 2895S (Shade 5)
y							3M™ Goggle Gear 500

5 - METALLURGY

Furnace works, casting control, mould maintenance
RISKS: Impact, dust, infrared, molten metal, glare (only goggles)

6 - SURFACE INSPECTION

Quality control, Wood lamp, curing
RISKS: Ultraviolet, Blue light

7 - WELDING

Welders assistant, brazing, gas welding, oxy-cutting
RISKS: Ultraviolet, glare, infrared, sparks

For additional eyewear options, please see our Eye Protection Catalogue.



Welding Protection

Guided by welders, trusted by welders,

The 3M™ Speedglas™ brand is the world's leading product line of welding safety and is a vital part of 3M's diverse range of personal protective equipment. More than 35 years ago, we went to the shipyards of Sweden to observe welders. They blindly struck arcs as they continually nodded their helmets down. They got accidentally flashed by other welders - or even themselves. We asked, "What if... welders could always see, even with their helmets down?"

Since then, we've been systematically addressing every welding ergonomic challenge you face.

**Subscribe to www.youtube.com/3MSpeedglas
Join the welding community on
www.facebook.com/3MSpeedglas
Tag us on Instagram @3MSpeedglas**

 **Speedglas™**



Scan this QR code or go to app.speedglas.com for your personal guide to 3M™ Speedglas™ Welding Helmets.

Available for smartphones and iPads.



Our Welding Helmets – sorted by features

	3M™ Speedglas™ Welding Helmet 9100						 *			
	3M™ Speedglas™ Welding Helmet 9100 Air						 *			
	3M™ Speedglas™ Welding Helmet 9100-QR						 *			
	3M™ Speedglas™ Welding Helmet 9100 FX						 *			
	3M™ Speedglas™ Welding Helmet 9100 FX Air						 *			
	3M™ Speedglas™ Welding Helmet 9100 FX (with safety helmet)						 *			
	3M™ Speedglas™ Welding Helmet 9100 MP						 *			
	3M™ Speedglas™ Welding Helmet SL									
	3M™ Speedglas™ Welding Helmet 100									
	3M™ Speedglas™ Welding Helmet 100-QR									

-  Premium eye protection
-  Side windows
-  Hearing protection**
-  Exhaust vents
-  Respiratory system
-  Passive option
-  Head protection
-  Auto-on
-  Flip-up
-  Graphics option

* Only in combination with 3M™ Speedglas™ Welding Filter 9100XXi ** 3M™ Peltor™ Hearing Protection available as accessories, see Speedglas product catalogue.

3M™ Speedglas™ Welding Helmets and Welding Filters

- Best***
- Better***
- Good***
- Not Recommended***



Technical specification	3M™ Speedglas™ Welding Helmets 9100, 9100 Air and 9100-QR				3M™ Speedglas™ Welding Helmet 9100 MP	
	9100XXi	9100XX	9100X	9100V	9100XXi	9100XX
3M™ Speedglas™ Welding Filter						
MMAW (Electrode)						
MIG/MAG						
TIG (>20A)						
TIG (1A-20A)						
Plasma (welding and cutting)						
Risk for hidden arc						
Tack welding						
Grinding (welding filter)						
Grinding (clear visor)	N/A					
Viewing area (welding filter)	73×107 mm		54×107 mm	45×93 mm	73×107 mm	
Battery lifetime	1 800 hours	2 000 hours	2 500 hours	2 800 hours	1 800 hours	2 000 hours
Solar cell	No		Yes		No	
Safety Helmet options	Yes (non air version)				Yes	
Classification	1 / 1 / 1 / 2				1 / 1 / 1 / 2	
Dark state	Shade 5, 8, 9–13				Shade 5, 8, 9–13	
Light state	Shade 3				Shade 3	
UV/IR Protection	Shade 13 (permanent)				Shade 13 (permanent)	
Auto ON	Yes	No			Yes	No
Switching time, light -dark	0,1 ms (+23° C)				0,1 ms (+23° C)	
Memory mode	Yes	No			No	
Delay (switching time, dark-light)	40–800 ms	40–1 300 ms			40–800 ms	40–1 300 ms
SideWindows option	Yes				Yes	
Exhaust vents	Yes (non air version)				N/A	
Number of sensors (arc detection)	3				3	
Approvals Eye and Face protection Welding helmet Welding filter Protection plates Visor plate	EN175:B EN 379 EN166:BT* N/A				EN175:B, EN 166 B EN 379 EN166:BT* EN166:BT*	
Approval Head protection Safety helmet	440 Vac (3M™ Safety Helmet H-701)				EN 397 440 Vac, LD	
Approval Respiratory Protection / NPF** Adflo Powered Air Respirator Versaflo V-500 Supplied Air Regulator	with Speedglas welding helmet 9100 Air EN 12941 (TH2) / NPF 50 EN 14594 (3B) / NPF 200				EN12941 (TH3) / NPF 500 EN14594 (3B) / NPF 200	

* According to the European Standards the mechanical strength (for this product) is classified as B; resistance to high speed particles at medium energy impact (120 m/s). The letter T indicates that the test for resistance to high speed particle was conducted at extremes of temperatures (-5° to +55°C).

** The nominal protection factor based on laboratory-measured performance data according to European Standards. The protection factor is assigned by local authorities in each European country and can therefore be different for each country.

*** The ratings (good - better - best) above refer to the products listed in this chart and should be seen as general recommendations based on differences in product comfort features and configuration options when using these selected Speedglas welding helmet series.



3M™ Speedglas™ Welding Helmet SL

At a mere 375 grams — including its auto-darkening filter — the 3M™ Speedglas™ Welding Helmet SL is 25% lighter than any other Speedglas model. Using specialised manufacturing techniques, we greatly reduced the weight of the auto-darkening filter. And unlike other lightweight helmets that can absorb moisture and become heavy, the Speedglas helmet SL is made from a strong, non-absorbent material.

Designed specifically for quick welding tasks, a motion sensor automatically turns ON the welding filter when you pick up the helmet.

Features and Benefits:

- Our narrowest helmet: perfect for many super tight spaces
- Five adjustable dark shades 8–12 and a light shade of 3
- Four sensitivity settings
- Appropriate for most arc welding processes — such as MMA, MIG/MAG, TIG and plasma welding

Grab & Go

- A motion sensor automatically turns ON the welding filter when you pick up the helmet
- Compatible with most 3M™ Disposable Particulate Respirators



Speedglas™



reddot design award
winner 2007



3M™ Speedglas™ Welding Helmet SL
When your #1 priority is super light

Technical specifications on pages 140-141.





3M™ Speedglas™ Welding Helmet 100 Series

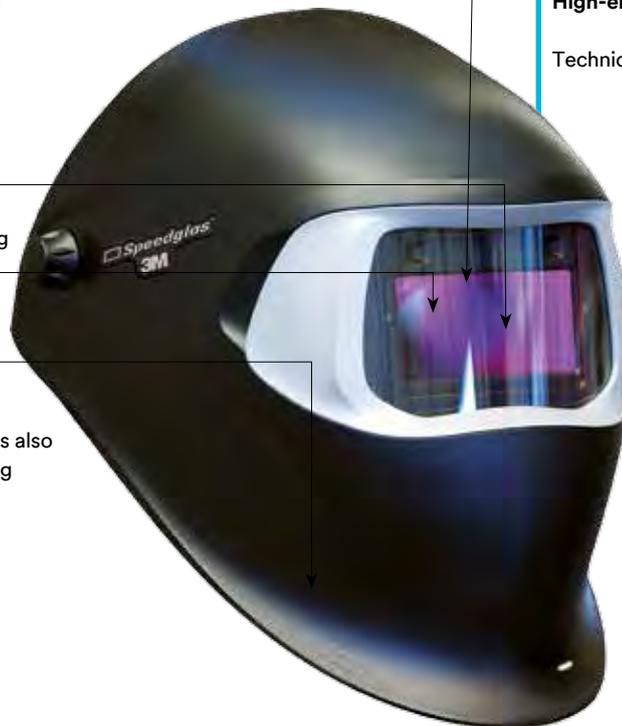
The easy-to-use 3M™ Speedglas™ Welding Helmet Series 100 allows you to take advantage of excellent optical quality and reliable light-to-dark switching at a highly affordable price.



In addition to the black model, you can choose from several highly expressive graphic helmet designs.

Features and Benefits:

- 3M™ Speedglas™ Welding filter 100V: five adjustable dark shades 8-12 and a light shade of 3. Three sensitivity settings
- Speedglas Welding filters 100S-10 and 100S-11 have single dark shades of 10 and 11 respectively, and a light shade of 3
- For grinding, lock-in shade 3 light state. Only applicable for the welding filter 100V
- High impact rating according to the requirements of the European Standard EN 175:B
- Appropriate for most arc welding processes, including MMA and MIG/MAG. The welding filter 100V is also appropriate for high amp TIG welding
- Compatible with most 3M™ Disposable Particulate Respirators



3M™ Speedglas™ Welding Helmet Series 100
High-end features, low-end price

Technical specifications on pages 140-141.

Make a visual impact



Future Combatant



Ice Hot



Raging Skull



Trojan Warrior



Blaze



Aces High



Xterminator



Steel Rose



Wild-N-Pink



Skull Jewels



Steel Eyes



Razor Dragon



3M™ Speedglas™ Auto-Darkening Filter 9100XXi

Introducing a new solution in our range of top-of-the-line auto-darkening filters: The 3M™ Speedglas™ Auto-Darkening Filter 9100XXi offers the same large viewing area as our 9100XX welding filter.

See the difference: improved optics in the new 9100XXi filter provide more contrast and natural-looking colours, as shown by these two photos. The photo below is shot through the 9100XXi welding filter.



9100XXi vs 9100XX in color

Features and Benefits:

- Fast Switching Between Welding and Grinding
- Seven dark shades, including 9-13 (variable), 5 for gas welding/cutting, and 8 for micro-plasma or low-amp TIG (even on settings as low as 1 amp)
- Auto ON/OFF - A new motion-sensor instantly turns ON the welding filter when you pick up the helmet
- Large viewing area 73x107 mm



More natural colours

The difference is easy to see. Yes, the light state is still shade 3! In fact, the improved welding filter optics can make your entire viewing experience feel more natural.



External controls and memory function

With a push of an external button, switch between grinding mode or your two memory settings for welding. You do not even have to take off a glove!

3M™ Speedglas™ Auto-Darkening Filter 9100XXi

Seeing is believing

Technical specifications on pages 140-141.



Easy Upgrade

The 9100XXi ADF is compatible with all welding helmets in the 3M™ Speedglas™ Welding Helmet Series 9100. However, to access the grinding and memory modes, the silver front panel included in the 3M™ Speedglas™ Auto-Darkening Filter Kit 9100XXi is required. This panel will only operate on Speedglas Welding Helmets 9100, 9100-Air and 9100-QR.



Watch the videos at www.youtube.com/3MSpeedglas



3M™ Speedglas™ Welding Helmet 9100

Protecting your eyes and face from radiation, heat and sparks - while providing a precise view of your work - makes your 3M™ Speedglas™ Welding Helmet 9100 one of your most important welding tools.

The design of the 9100 headband suspension avoids pressure on vulnerable areas. And it provides multiple adjustment combinations so you can tailor the helmet to fit your personal preferences and comfort settings, while increasing helmet stability.



reddot design award
best of the best 2009



product
design
award
2009

Features and Benefits:

- Exhaust vents readily direct exhaled air out of the helmet, reducing likelihood of a foggy welding filter
- A selection of welding filters with superior optical performance for continuous viewing comfort. Arc detection down to 1 amp TIG
- Large coverage for ear and side of head
- SideWindows: Shade 5 filters that widen your field of vision
- High-comfort 3M™ Speedglas™ Headband 9100
- 100% compatible with our top-of-the-line series of 3M™ Speedglas™ Welding Filter Series 9100
- Meets the requirements of mechanical resistance to high speed particles according to EN 175 class B



3M™ Speedglas™ Welding Helmet 9100
Designed for your ultimate protection

Technical specification on pages 140-141.



The headband that shapes to your head

Coverage is key

Helmet coverage is a concern among many welders. And the 9100 series welding helmets are deeper and wider compared to earlier series, improving coverage of ears, neck and sides of the head from heat and welding sparks. In addition there are several accessories available to extend coverage.

More comfortable when raised

Lifted into the raised position, the helmet's high point is lower than many other helmets. From a design standpoint that means keeping the helmet as close as possible to your head. Because the helmet is more balanced, you do not need to tighten the headband as much, further increasing your wearing comfort.

Parking position

The smooth up-and-down pivot action can be locked in the up position - a light pull lowers the helmet back down again.



3M™ Speedglas™ Welding Helmet 9100 FX

3M™ Speedglas™ Welding Helmet 9100 FX, a flip up combination of an auto-darkening welding helmet and a protective visor.

Not only is the viewing area larger compared to previous models, we totally redesigned the geometry of the helmet for a wider field of view in all directions.



reddot design award
winner 2012



Features and Benefits:

- Side windows: Shade 5 filters that widen your field of vision
- The big, 17 × 10 cm clear protective visor is curved, increasing your peripheral vision
- High-comfort 3M™ Speedglas™ Headband 9100
- Exhaled air is channelled out via side exhaust vents
- Meets the requirements of mechanical resistance to high speed particles according to EN 175:B and EN 166:B
- 100% compatible with our top-of-the-line series of 3M™ Speedglas™ Welding Filter Series 9100



3M™ Speedglas™ Welding Helmet 9100 FX
Wider field of view with flip-up front

Technical specification on [pages 140-141](#).



Safety Helmet Adapter

Using the safety helmet adapter, you can easily fit many of the industry's safety helmets with the Speedglas welding helmet 9100 FX.

3M offers this complete welding helmet system including the 3M™ Safety Helmet G-3001



The wide field of view and flip-up features are also available with powered or supplied air systems: read more about the 3M™ Speedglas™ Welding Helmet 9100 FX Air on [page 148](#).





Continuous head protection

Designed to fit many of the industry's safety helmets, the 3M™ Speedglas™ Quick Release (QR) Rail swiftly clasps onto your safety helmet via a releasable ratcheting mechanism.

With the rail installed, you can easily detach the welding visor, keeping your safety helmet protection in place as you perform non-welding tasks. See further technical specification on **pages 140-141**.

Quickly Connect/Disconnect

Even with a gloved hand, you can easily attach the 3M™ Speedglas™ Welding Helmet 9100-QR (or 100-QR). When your welding work is finished, you can detach the welding helmet as quickly as you take off a baseball cap. 3M offers a complete welding helmet system including the 3M™ Safety Helmets H-701 and G-3001.

Use Your Safety Helmet ...Or Ours

The 3M™ Speedglas™ Quick Release (QR) Rail allows you to attach a Speedglas auto-darkening welding helmet to a wide range of the industry's most popular safety helmets. We recommend using a safety helmet with a ratchet headband, for better stability.



See videos and learn more about Speedglas quick release welding helmets, visit 3M website:

www.3M.eu/QuickRelease

Or scan this QR-code:





3M™ Speedglas™ Welding Helmets 9100 Air and 9100 FX Air

These two helmets bring welding respiratory protection to a new level, offering side windows, flip-up function, excellent optics and wider viewing angle.

We now have helmets and faceshields for virtually every welder's needs that can be used in combination with powered or supplied air respiratory protection. See further technical specification on [pages 140-141](#).



Features and Benefits:

- All the benefits of the Speedglas 9100 series welding helmets but can also be used with 3M™ Adflo™ Powered Air Respirator or 3M Versaflo™ Supplied Air Regulator V-500E
- Exclusive shade 5 filters that widen your field of vision
- High-comfort 9100 head suspension
- The 3M™ Quick Release Swivel (QRS) enables one-handed breathing tube connection and release
- Meets the requirements of mechanical resistance to high speed particles according to EN 175:B



3M™ Speedglas™ Welding Helmet 9100 Air

The airduct is an integral part, providing a refreshing airflow across your entire breathing zone. The middle channel keeps the filter virtually fog-free, while two side channels provide smoothly distributed air to the area of your mouth and nose.

* When used with 3M™ Adflo™ Powered Air Respirator.

3M™ Speedglas™ Welding Helmet 9100 FX Air Excellent view and respiratory protection



For constant TH3-rated* respiratory protection and excellent vision in a flip-up model – meet the 3M™ Speedglas™ Welding Helmet 9100 FX Air.

A quick lift of the silver front and you get a big, 17x10 cm, clear view - perfect for precision grinding in low light conditions, whilst maintaining respiratory protection.





3M™ Speedglas™ Welding Helmet 9100 MP

We've seamlessly integrated five levels of welder protection: head, eye, face, respiratory and hearing into one extraordinarily comfortable and easy-to-use system. The 3M™ Speedglas™ Welding Helmet 9100MP (Multi Protection): uncompromising, all-in-one, welding protection for highly demanding environments.

Features and Benefits:

- A big (17×10cm) curved protective visor with excellent views up, down and peripherally
- Meets EN 166:BT for high speed particle protection*
- Respiratory protection - TH3**
- The top shell is made from heat resistant polycarbonate and meets the standard EN397 for industrial safety helmets
- An optional high visibility, aluminium fabric reflects hot sunlight and welding heat
- Two shade 5 passive side windows add peripheral welding vision
- Designed from inception to accept 3M™ Peltor™ Earmuffs
- It readily connects to both 3M™ Adflo™ Powered Air Respirator and 3M™ Versaflo™ Supplied Air Regulator V-500E



3M™ Speedglas™ Welding Helmet 9100 MP Multiple protection for welders

Technical specification on pages 140-141.



3M™ Speedglas™ Welding Helmet 9100 MP with 3M™ Adflo™ Powered Air Respirator
Further information on the Adflo respirator on page 150.



3M™ Speedglas™ Welding Helmet 9100 MP with 3M™ Versaflo™ Supplied Air Regulator V-500E
Further information on the Versaflo regulator V-500E on page 57.

* European Standards classify this visor as "B," with resistance to high speed particles at medium energy impact (120 m/s).

** When used with 3M™ Adflo™ Powered Air Respirator



3M™ Adflo™ Powered Air Respirator

Since its launch, 3M™ Adflo™ Powered Air Respirator has become one of the most popular powered air respirators in the world.



The Adflo powered air respirator is specifically designed to meet your welding needs. Its continuous airflow provides filtered air that takes much of the heat and sweat out of welding.

By using the Adflo respirator, you get both increased protection and comfort all day long.

Features and Benefits:

- The slim profile and ergonomic design make it easier to go into tight welding spaces and offers the quality and functions you should expect from a robust and easy-to-use respiratory system
- With the right type of filter, the Adflo respirator effectively protects against both particles and gases - all in one system
- Selectively replace either the particle or the gas filter as needed: you don't need to change both filters at the same time
- The new Li-ion batteries makes the turbo more lightweight and balanced for even greater comfort during the full shift
- The airflow is always a constant nominal rate of 170 litres per minute, regardless of the battery's charge or the particle loading of the filter
- For hot, humid jobs, you can increase the airflow to 200 litres per minute by simply pushing the ON button a second time



3M™ Adflo™ Powered Air Respirator An adaptable system that saves money

If you are using an older Adflo respirator, you can easily upgrade to a new level of performance incorporating Li-ion battery, making the turbo almost 20% lighter.

To learn more about the Adflo respirator - visit www.3m.eu/adflo



Higher altitudes



For welders working in higher altitude locations, where the regular Adflo respirator might not work properly, there is a special respirator version that adjusts for changes in air density; 3M™ Adflo™ High Altitude Powered Air Respirator. With this version you can work at altitudes between 0-3000 meters above sealevel (0-1500 meters with gas filter).



Body Protection



Protective Apparel

Differential Permeation. Applied to returning you home safely.

At 3M we have a select and high quality range of CE Certified products from CE simple coveralls to PPE Directive Category III Coveralls, which provide protection against many hazards.

The 3M range of Protective Apparel offers a variety of features, from the use of fabrics with specialist treatments for enhanced wear and added protection, to breathable back panels for increased comfort. Our experts can work closely with you, to help you identify hazards and best protect your workers against them.

Standards

There are many tests and standards that apply to protective coveralls and selection can be a daunting task. The following section outlines the different options available to help you select the right product for your employees.

Protection Types

Depending on the materials and construction protective coveralls can be designed for either hazardous applications (certified to CE Category III) or non-hazardous applications (approved as CE Simple Category 1). Products for hazardous applications can be tested and certified to any of six different “Type” standards providing guidance on suitability of use:

Category	Symbol	Protection Type	Standard	3M Products
CE Category III 		1 – Gas Tight	EN 943-1	N/A
		2 – Non-gas tight	EN 943-1	N/A
		3 – Liquid Jet Protection	EN 14605 + A1	4570
		4 – Liquid Spray Protection	EN 14605 + A1	4570, 4565
		5 – Hazardous Particulate Protection	EN ISO 13982	4570, 4565, 4545, 4540+, 4535, 4532+, 4530, 4520, 4515, 4510
		6 – Liquid Splash Protection	EN 13034 + A1	
CE Category I		CE Simple		4500, 4505

Additional Standards

Some 3M™ Protective Coveralls and their materials are approved to additional standards for specialist applications.

Symbol/Standard	Protection Type
	Protection against micro-organisms or infective agents (EN 14126:2003)
	Protection against nuclear particles (EN 1073-2:2002)
	Anti-static (EN 1149-5:2008)
ISO 15025 / ISO 14116	Limited Flame Spread Resistance
	Where added to the above symbols please refer to the appropriate user instructions for further information on the compliance of this product





Materials

The following is a guide that offers a brief description and comparison of the materials used in 3M's protective coverall range. Base materials can be treated, for instance, with an anti-static treatment, to enhance the total protection offered.

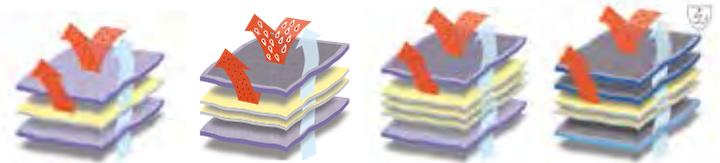
Non-woven Polypropylene

Offers comfortable light-duty protection against nonhazardous liquids and dust.



Spunbond-Meltblown Polypropylene (SMS)

'SMS' can be layered differently to adjust the protective and physical properties of the material. Standard SMS-material is very breathable and offers a good barrier against dusts and limited liquid splashes. If treated, as 3M's Protective Coverall 4532+, an enhanced level of splash protection can be achieved.



Microporous Laminates

'Microporous laminates' offer a higher level of liquid splash protection, while the micropores allow for some breathability.



Non-microporous Laminates

'Non-microporous laminates' can offer an even higher level of liquid protection. Adding multiple layers of the laminate can also increase robustness and chemical hold.



Design Features

3M™ Protective Coveralls can offer a variety of features depending on your needs. The illustration below highlights some of the features available:

Contains no components made from natural rubber latex

Two-way zipper for on/off convenience

Anatomical design and fit for optimal wear, coverage and comfort

Elasticized waist and ankles and knit or elastic cuffs on all models for increased comfort and mobility

Three panel hood design on most models for compatibility with complementary PPE

Seamless shoulder and sleeve tops for fewer entry points for contaminants and increased comfort

Storm flap on all coveralls to help provide additional protection

Available in a variety of sizes (S-4XL).

- Backed by 3M global technical capabilities and support
- Opportunities for customisation
- 2015 3M Protective Apparel sizing enhancement implemented globally



3M™ Coverall 4500 and 3M™ Coverall 4505

The 3M™ Coverall 4500 and 3M™ Coverall 4505 are CE simple suits designed and suitable for non-hazardous applications.

Whether it is for domestic DIY use, light duty industrial cleaning and maintenance applications or environments where hygiene and cleanliness are important, the 3M™ Coverall 4500 and 3M™ Coverall 4505 are excellent economic solutions to keep the wearer clean or dry.

3M™ Coverall 4500

Key Features:

- Breathable and light duty protection
- Strong, durable 45gsm polypropylene fabric
- Storm flap over zip
- Elasticated hood, cuffs, ankles and waist
- Available in blue and white
- Serged seams



Colour: White, Blue
Protection: CE Simple, Category I
Sizes: S-4XL



Typical Applications: Popular Choice

- Light duty cleaning
- Warehousing
- Janitorial
- Domestic DIY

3M™ Coverall 4505

Key Features:

- Light duty non-hazardous liquid protection
- Thick, laminated material for extra robustness
- Repels water and some non-hazardous oils
- Elasticated hood, cuffs, ankles and waist
- 2-way zip with storm flap
- Serged seams



Colour: White
Protection: CE Simple, Category I
Sizes: M-2XL



Typical Applications: Popular Choice

- Light duty cleaning
- Warehousing
- Janitorial
- Domestic DIY
- Water-based applications



3M™ Protective Coverall 4510



The 3M™ Protective Coverall 4510 is an economic solution which offers quality and protection from limited chemical splashes such as those from paint spraying and is certified to the PPE Directive Category III, Type 5/6 protection standard. The material is microporous, allowing air and moisture to escape from within the suit, while helping to protect from the hazard on the outside.

Typical Applications

Popular Choice

- Light industrial cleaning
- Machine maintenance
- Paint spraying & powder coating
- Coating & resin applications
- Crime scene investigation

Suitable for Consideration

- Asbestos inspection and removal
- Site preparation, insulation.
- Cement manufacturing
- Grinding & polishing
- Pharmaceutical processing & handling toxic powders
- Cleanrooms

Features and Benefits:

- Excellent barrier against dry particles and certain limited liquid chemical splash (CE Type 5/6)
- Laminated microporous material
- 2-way zipper with storm flap for added on-off convenience and extra protection
- Elastic cuffs, waist and ankles for a better fit and freedom of movement
- Super low-linting
- Anti-static treatment to EN 1149 to reduce charge build up
- Meets inward leakage requirements of EN 1073-2 for protection against nuclear particles
- Biological protection tested to EN 14126



3M™ Protective Coverall 4510 Type 5/6

Colour: White

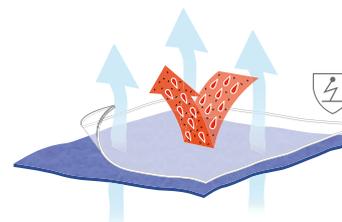
CE Category III

Sizes: S-4XL



Fabric material

The anti-static treated 3M protective coverall 4510 material is made using a layer of soft, spunbond polypropylene and a layer of light, but high quality anti-static treated polyethylene laminate film giving good levels of barrier efficiency and protection.



Seam Technology

Seams are serged for Type 5/6 and certain seams bound for extra protection.





3M™ Protective Coverall 4515



Low cost hazardous dust protection

The 3M™ Protective Coverall 4515 is an economic solution to protect from hazardous dusts such as asbestos fibres exposed to during site inspection. While protecting on the outside, the breathable material allows air to escape from the inside to reduce heat build-up and discomfort. Available in white, blue, red and orange, the range is certified to PPE Directive Category III, Type 5/6 protection for both hazardous dusts and liquid splashes.

Typical Applications

Popular Choice

- Asbestos inspection
- Site preparation, insulation
- Construction

Suitable for Consideration

- Cement manufacturing
- Grinding & polishing
- Light industrial cleaning
- Machine maintenance

Features and Benefits:

- Excellent barrier against dry particles and limited liquid splash (CE Type 5/6)
- Meets inward leakage requirements of EN 1073-2 for protection against nuclear particles
- Robust, highly breathable 50gsm SMS material
- 2-way zipper with storm flap for added on-off convenience and extra protection
- Elastic cuffs, waist and ankles for a better fit and freedom of movement
- Low-linting
- Available in white, blue, red and orange



3M™ Protective Coverall 4515 Type 5/6

Colour: White, blue, red and orange

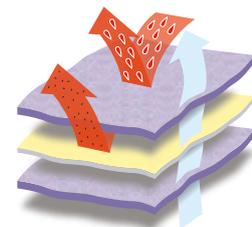
CE Category III

Sizes: S-4XL



Fabric material

The material used in the 3M protective coverall 4515 sandwiches a single thick filtering layer of melt-blown polypropylene between two thinner layers of softer spun bond polypropylene delivering a finished durable, breathable 50gsm protective material that aides air flow to reduce heat stress and improve comfort.



Seam Technology

Seams are serged for Type 5/6 protection.





3M™ Protective Coverall 4520



Made using the latest lightweight, breathable material technology 3M presents the 3M™ Protective Coverall 4520, a PPE Directive Category III, Type 5/6 protective garment.

Typical Applications

Popular Choice

- Asbestos inspection
- Site preparation, insulation
- Pharmaceutical processing and handling toxic powders

Suitable for Consideration

- Asbestos removal
- Cement manufacturing
- Grinding & polishing
- Light industrial cleaning
- Machine maintenance
- Construction work
- Light paint spraying/powder coating

Features and Benefits:

- Excellent barrier against dry particles and limited liquid splash (CE Type 5/6)
- SMMMS material technology for reduced heat stress and breathable comfort all day
- Low-linting
- Extremely lightweight and comfortable compared to many certified coveralls available in the marketplace
- 3-panel elasticated hood for enhanced compatibility with complimentary PPE
- Knitted cuffs and elasticated waist and ankles for increased comfort and freedom of movement
- 2-way zipper with sealable tab on stormflap for added convenience and extra protection
- Anti-static treatment to EN 1149 to reduce charge build up
- Meets inward leakage requirements of EN 1073-2 for protection against nuclear particles



3M™ Protective Coverall 4520 Type 5/6

Colour: White with green back panel

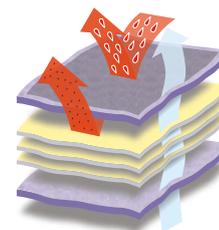
CE Category III

Sizes: S-4XL



Latest Material Technology

With 3 layers of melt-blown polypropylene in-between 2 layers of spunbound polypropylene, the 3M protective coverall 4520 fabric has been specifically designed to improve air flow and breathability, thereby reducing heat stress and enhancing comfort levels. The middle 3 layers act as a filter to effectively protect against hazardous dust and splash and the outer 2 layers offer strength and durability whilst maintaining a soft, comfortable feel.



Seam Technology

Seams are serged for Type 5/6 protection.





3M™ Protective Coverall 4520CS



Made using the latest lightweight, breathable material technology 3M presents the 3M™ Protective Coverall 4520CS, a PPE Directive Category III, Type 5/6 protective garment.

With the same premium comfort and protection as the standard 3M protective coverall 4520, but with a standard collar for greater compatibility with Powered and Supplied Air Respirators.

Typical Applications

Popular Choice

- Asbestos inspection
- Site preparation, insulation
- Pharmaceutical processing and handling toxic powders

Suitable for Consideration

- Asbestos removal
- Cement manufacturing
- Grinding & polishing
- Light industrial cleaning
- Machine maintenance
- Construction work
- Light paint spraying/powder coating

Features and Benefits:

- Excellent barrier against dry particles and limited liquid splash (CE Type 5/6)
- SMMMS material technology for reduced heat stress and breathable comfort all day
- Extremely lightweight and comfortable compared to many certified coveralls available in the marketplace
- Low-linting
- Collar standard neck finish for when a hood is not required or interferes with alternative head, face or respiratory protection
- Knitted cuffs and elasticated waist and ankles for increased comfort and freedom of movement
- 2-way zipper with sealable tab on stormflap for added convenience and extra protection
- Anti-static treatment to EN 1149 to reduce charge build up
- Meets inward leakage requirements of EN 1073-2 for protection against nuclear particles



3M™ Protective Coverall 4520CS Type 5/6

Colour: White with green back panel

CE Category III



Sizes: M-2XL



Latest Material Technology

With 3 layers of melt-blown polypropylene in-between 2 layers of spunbound polypropylene, the 3M protective coverall 4520 fabric has been specifically designed to improve air flow and breathability, thereby reducing heat stress and enhancing comfort levels. The middle 3 layers act as a filter to effectively protect against hazardous dust and splash and the outer 2 layers offer strength and durability whilst maintaining a soft, comfortable feel.



Seam Technology

Seams are serged for Type 5/6 protection.





3M™ Protective Coverall 4530



The 3M™ Protective Coverall 4530 is a PPE Directive, CE Category III, Type 5/6 protective garment, made from a breathable SMMS material technology and includes a host of comfort features. The material also has a flame resistance treatment, which allows the fabric to perform to ISO 14116 Index 1*.

Typical Applications

Popular Choice

- Metal grinding and polishing
- Oil & Gas industry
- Cement manufacturing
- Welding

Suitable for Consideration

- Asbestos inspection and removal
- Site preparation and insulation
- Light industrial cleaning
- Machine maintenance
- Pharmaceutical processing
- Handling toxic powders
- Painting and coating

Features and Benefits:

- Excellent barrier against dry particles and certain limited liquid chemical splash (CE Type 5/6)
- Limited flame spread resistance to ISO 14116 Index1/0 (material only)
- Highly breathable robust 54gsm SMMS material
- 3-panel elasticated hood for enhanced compatibility with complimentary PPE
- 2-way zipper with sealable storm flap for added on-off convenience and extra protection
- Knitted cuffs and elastic waist and ankles for a better fit and freedom of movement
- Enhanced triangular gusset panel
- Low-linting
- Anti-static treatment to EN 1149 to reduce charge build up
- Meets inward leakage requirements of EN 1073-2 for protection against nuclear particles
- Available in blue (with white triangle) and white



3M™ Protective Coverall 4530 Type 5/6

Colour: Blue with white back panel, and white

CE Category III

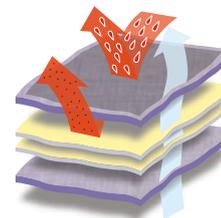


Sizes: M-4XL



Fabric Material

With layers of Meltblown polypropylene in between 2 layers of spun bond polypropylene the 3M protective coverall 4530 fabric allows airflow, increasing breathability, reducing heat stress and improving comfort. The melt blown layers are inserted with hot air and act as a barrier while the two outer spun bond layers make the coverall soft and breathable.



* The additional flame spread resistance treatment enables the material to give limited flame spread protection (ISO 14116) when worn over an Index 2 or 3 garment. This may extend the life of the more expensive thermal protective garments.

Seam Technology

Seams are serged for Type 5/6 protection.





3M™ Protective Coverall 4532+



The 3M™ Protective Coverall 4532+ range is made from a highly breathable and lightweight 5 layered SSMMS material, providing the wearer with CE Category III, Type 5/6 protection with specialist treatments providing anti-static protection and an enhanced liquid repellency.

Typical Applications

Popular Choice

- Metal grinding and polishing
- Oil/greasy environments
- Painting and coating
- Cement manufacturing

Suitable for Consideration

- Light industrial cleaning
- Machine maintenance
- Pharmaceutical processing
- Handling toxic powders
- Resin applications

Features and Benefits:

- Specialist coatings enable this product to be used in many applications not usually suitable for SMS Based coveralls
- SSMMS material, see Fabric Material
- 3-panel elasticated hood for enhanced compatibility with complimentary PPE
- Knitted cuffs and elasticated waist and ankles
- 2-way zipper for added convenience and a storm flap with full sealable tape for extra protection
- Enhanced and reinforced triangular gusset panel to increase product durability
- Anti-static treatment to EN 1149 to reduce charge build up
- Meets inward leakage requirements of EN 1073-2 for protection against nuclear particles
- Low linting
- Available in blue (with a light blue triangle back panel) and Cool white



3M™ Protective Coverall 4532+ Type 5/6

Colour: Blue with a light blue back panel and Cool white

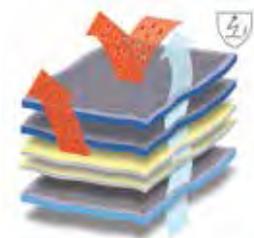
CE Category III

Sizes: S-4XL



Fabric Material

The 3M protective coverall 4532+ is made using a 52gsm SSMMS, which consists of two outer layers of spunbond polypropylene (SS) encasing two layers of melt-blown polypropylene (MM) and a third layer of spunbond (S) on the underside. The fabric has been specifically designed to be durable whilst enabling air flow thereby reducing heat stress and enhancing wearer comfort. The middle 2 layers act as a filter to effectively protect against noxious dust and splash whilst the outer layers offer strength and increased liquid hold out from the alcohol and oil repellence treatment.



Unique treatment encourages the oil to bead rather than soak through.

Seam Technology

Seams are serged for Type 5/6 and certain seams bound for extra protection.





3M™ Protective Coverall 4535



If you're looking for a balance of protection, durability and additional comfort, look no further than the 3M™ Protective Coverall 4535. Certified to PPE Directive Category III, Type 5/6 protection, it utilises a dual material design with added comfort features to optimise wearer acceptance.

Typical Applications

Popular Choice

- Coating & resin applications
- Light industrial cleaning
- Machine maintenance
- Paint spraying & powder coating
- Forensics

Suitable for Consideration

- Asbestos inspection and removal
- Site preparation, insulation.
- Cement manufacturing
- Grinding & polishing
- Pharmaceutical processing and handling toxic powders

Features and Benefits:

- Excellent barrier against dry particles and certain limited liquid chemical splash (CE Type 5/6)
- Robust, super low-linting laminated microporous material
- Extra large breathable back panel for improved air circulation and reduced heat stress
- 2-way zipper with storm flap for added on-off convenience and extra protection
- Knitted cuffs with elasticated waist and ankles for increased comfort and freedom of movement
- Low-linting
- Anti-static treatment to EN 1149 to reduce charge build up
- Meets inward leakage requirements of EN 1073-2 for protection against nuclear particles



3M™ Protective Coverall 4535 Type 5/6

Colour: White with blue back panel

CE Category III



Sizes: S-3XL

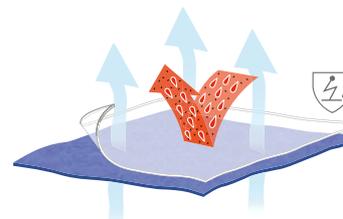


Fabric Material

The front of the 3M protective coverall 4535 combines a high quality polyethylene laminate providing an excellent barrier, on top of a layer of soft, spunbond polypropylene fibres creating a robust, yet comfortable 55gsm protective fabric. The large blue back panel is made from 5 layers of spunbond and meltblown polypropylene giving excellent breathability, whilst maintaining the Type 5/6 level of protection.



SMMMS back-panel.



Microporous laminate fabric.

Seam Technology

Seams are serged for Type 5/6 and certain seams bound for extra protection.





3M™ Protective Coverall 4540+



With premium dual material technology and offering CE Category III, Type 5/6 protection, the 3M™ Protective Coverall 4540+ is ideal for applications where both high levels of protective performance and comfort are desired.

Typical Applications

Popular Choice

- Paint spraying & powder coating
- Coating & resin applications
- Light industrial cleaning
- Machine maintenance

Suitable for Consideration

- Asbestos inspection and removal
- Site preparation, insulation.
- Cement manufacturing
- Grinding & polishing
- Pharmaceutical processing and handling toxic powders

Features and Benefits:

- Excellent barrier against dry particles and certain liquid chemical splash (CE Type 5/6)
- Soft and light, super low-linting laminated microporous material that drapes and hangs well over the body facilitating ease of movement
- Back panel made of breathable SMMMS material for improved air circulation and reduced heat stress
- 2-way zipper with fully sealable storm flap for added on-off convenience and extra protection
- 3-panel hood design for enhanced compatibility with complimentary PPE
- Knitted cuffs and elasticated waist and ankles for increased comfort and freedom of movement
- Enhanced and reinforced triangular gusset panel to increase product durability
- Anti-static treatment to EN 1149 to reduce charge build up
- Meets inward leakage requirements of EN1073-2 for protection against nuclear particles
- Low linting



3M™ Protective Coverall 4540+ Type 5/6

Colour: White with blue back panel

CE Category III



Sizes: S-4XL

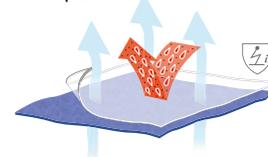


Fabric Material

The 3M protective coverall 4540+ material is made using a composite layer of soft, spunbond fibres and a layer of light, but high quality polyethylene laminate film giving excellent levels of barrier efficiency and protection. Compared with many other laminates it has a particularly soft feel and drapes well over the body. The blue back panel is made from 5 layers of spunbond and meltblown polypropylene giving excellent breathability, whilst maintaining the Type 5/6 level of protection.



SMMMS back-panel.



Microporous laminate fabric.

Seam Technology

Seams are serged for Type 5/6 and certain seams bound for extra protection.





3M™ Protective Coverall 4545



The 3M™ Protective Coverall 4545 uses the same laminate material as that on the 3M™ Protective Coverall 4540+. The suit is designed to be comfortable but highly protective to PPE Directive Category III, Type 5/6 standards.

It is certified to protect against radioactive particles and biological agents and reduce build up of static charge whilst also being super low-linting - all making it suitable for a wide range of applications, including in many cleanrooms.

Typical Applications

Popular Choice

- Light industrial cleaning
- Machine maintenance
- Paint spraying & powder coating
- Coating & resin applications
- Cleanrooms
- Forensics

Suitable for Consideration

- Asbestos inspection and removal
- Site preparation, insulation.
- Cement manufacturing
- Grinding & polishing
- Pharmaceutical processing and handling toxic powders
- Metallurgy

Features and Benefits:

- Excellent barrier against dry particles and certain limited liquid chemical splash (CE Type 5/6)
- Biological protection tested to EN 14126
- Soft, well-draping, laminated microporous material
- 3-panel hood design for enhanced compatibility with complimentary PPE
- 2-way zipper with sealable storm flap for added on-off convenience and extra protection
- Knitted cuffs with elasticated waist and ankles for increased comfort and freedom of movement
- Enhanced and reinforced triangular gusset panel to increase product durability
- Super low-linting
- Anti-static treatment to EN 1149 to reduce charge build up
- Meets inward leakage requirements of EN 1073-2 for protection against nuclear particles
- Supplied in space saving vacuum packaging



3M™ Protective Coverall 4545 Type 5/6

Colour: White

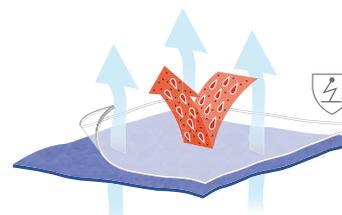
CE Category III

Size: S-4XL



Fabric Material

The 3M protective coverall 4545 material is up to 20% lighter than previous 3M polyethylene laminate materials and made using a composite layer of soft, spunbond fibres and a layer of light, but high quality polyethylene laminate film with an antistatic treatment, giving excellent levels of barrier efficiency and liquid protection.



Seam Technology

Seams are serged for Type 5/6 and certain seams bound for extra protection.





3M™ Protective Coverall 4565



Offering CE Category III, Type 4/5/6 protection, the 3M™ Protective Coverall 4565 has an impressive level of liquid barrier protection whilst maintaining its unique soft feel and well-fitting drape. With tape applied over the seams a greater level of total protection and seam durability is offered versus Type 5/6 products.

Typical Applications

Popular Choice

- Asbestos removal
- Pharmaceutical processing
- Handling toxic powders
- Cleanrooms
- Pesticide Spraying

Suitable for Consideration

- Asbestos inspection
- Site preparation, insulation
- Cement manufacturing
- Grinding & polishing
- Industrial cleaning and maintenance
- Painting & coating, resins

Features and Benefits:

- Excellent barrier against dry particles, liquid certain chemical splash and spray (CE Type 4/5/6)
- Taped seams across the suit for better protection and increased durability
- Soft, well-draping laminated material
- Biological protection tested to EN 14126
- 2-way zipper with fully sealable storm flap for added on-off convenience and extra protection
- 3-panel hood design for enhanced compatibility with complimentary PPE
- Knitted cuffs and elasticated waist and ankles for increased comfort and freedom of movement
- Anti-static treatment to EN 1149 to reduce charge build up
- Super low-linting
- Supplied in space saving vacuum packaging
- Meets inward leakage requirements of EN 1073-2 for protection against nuclear particles



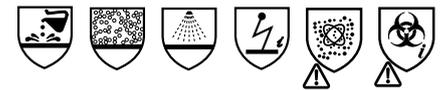
3M™ Protective Coverall 4565 Type 4/5/6

Colour: White with red taped seams

CE Category III

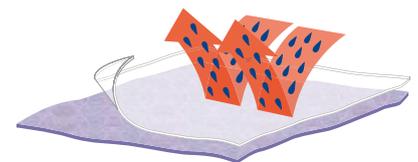


Sizes: S-4XL



Fabric Material

20% lighter than previous 3M polyethylene laminate materials, the 3M protective coverall 4565 combines a composite base of nonwoven fibres and a polyethylene film giving good barrier efficiency against many hazardous liquids. The laminate is also ultra-low linting and anti-static treated making it suitable for a wide variety of potentially hazardous applications.



Seam Technology

Seams are stitched and overtaped with a red protective tape to offer increased seam strength and an effective barrier to liquids and particulates.



CE Type 4:

Testing to Type 4 standards requires the coverall material to be put through additional testing. A whole body suit test is conducted with a higher volume of liquid than the equivalent Type 6 test. More importantly, the material and the seams have permeation tests conducted with a minimum of one chemical to assess whether the chemical/s can get through the material at a molecular level. The construction of the laminate used in the 3M protective coverall 4565 offers a superior performance in this area compared to many other Type 4 products.



3M™ Protective Coverall 4570



The 3M™ Protective Coverall 4570 is a high performance chemical protective suit, certified to PPE Directive Category III, Type 3/4/5/6 levels of protection, making it suitable to protect against a range of chemical jets and sprays. With additional design features including an enlarged zip and finger loops, a double-closing storm flap system and chin flap, convenience of use can be offered without compromising the high level of protection given.

Typical Applications

Popular Choice

- Chemical mixing and handling
- Chemical/oil spills and clean up
- Metal Refining
- Metal Etching
- Hazardous waste remediation
- Decontamination/Site Decommissioning
- Tank cleaning
- Infective agents/Biological Hazards
- Handling Toxic Powders

Suitable for Consideration

- Light industrial cleaning
- Machine maintenance
- Pharmaceutical processing
- Handling toxic powders
- Resin applications

Features and Benefits:

- Excellent barrier for jet spray and liquid tight chemical protection (CE Type 3/4)
- Biological / infective agent protection (EN 14126) to the maximum class
- Seams are taped with a multi layer coextruded clear tape, giving a discreet finish and a consistent seal and barrier
- 3-panel hood design for enhanced compatibility with complimentary PPE
- Two stormflaps combined with double colourcoded zips to create a double seal for added convenience and extra protection
- Large zip for ease of use
- Elasticated cuffs with thumb loops for secure fit during overhead work
- Elasticated waist and ankles for increased comfort and freedom of movement
- Glued in waist elastic and seam free shoulders to minimise entry points etc
- Adhesive chin flap
- Super low-linting
- Anti-static treatment to EN 1149 to reduce charge build up
- Meets inward leakage requirements of EN 1073-2 for protection against nuclear particles



3M™ Protective Coverall 4570 Type 3/4/5/6

Colour: Grey

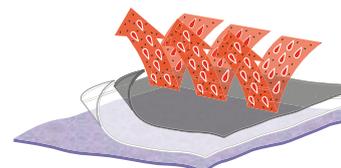
CE Category III

Size: S-4XL



Fabric Material

The 3M™ Protective Coverall 4570 uses a heavy-duty material blending a soft inner layer of spun bond fibres with multiple outer layers of a high performance anti-static treated polyethylene laminate, to offer a high level of liquid protection.



Seam Technology

Seams are stitched and overtaped with a clear heat applied multi-layer chemically protective tape to offer increased strength and an effective barrier to liquids and particulates.



For technical information and chemical permeation data, please request a Technical Datasheet.

Accessories

From head to toe, we've got you covered with a full range of add-on options to give your workers the body protection they need.

Coats

3M™ Lab Coat 4440

- Made of the same laminated material as the Type 5/6 3M Protective Coverall 4535
- Anti-static treated
- Knitted cuffs
- Zip fastener
- Available in white



3M™ Lab Coat 4432+

- Made of the same SSMMS material as the Type 5/6 3M Protective Coverall 4532+
- Anti-static treated
- Internal pocket
- Knitted cuffs
- Zip fastener
- Available in cool white



3M™ Visitor Coat 4400

- Made of the same material as the 3M Coverall 4500
- 100% soft, breathable and lightweight polypropylene
- Zip fastener
- Internal pocket
- Available in blue and white



Overboots

3M™ Overboot 450



Slip Resistant Sole

- Elastic at the calf
- Universal size with ties to help provide a good fit
- Made of the same laminated material as the Type 5/6 3M™ Protective Coverall 4535
- 3M overboot 450 has a PVC sole to help reduce the risk of slipping
- Laminated material ties to minimise particle shed and contamination in particle restricted environments such as cleanrooms

3M™ Overboot 440



Standard Sole

Overshoes

3M™ Overshoe 442



- Made of the same laminated material used in the Type 5/6 3M™ Protective Coverall 4535
- Elastic at ankle
- Anti-static treated

3M™ Overshoe 402



- General non-hazardous substance protection
- Sole has printed pattern to help reduce the risk of slipping
- Elastic at ankle

Oversleeves

3M™ Oversleeve 444



- Made of the same laminated material as the Type 5/6 3M Protective Coverall 4510
- 16 inch length covering wrist to top of arm
- Elastic finish on top end for secure fit
- 3M™ Oversleeve 445 features knitted cuffs
- Anti-static treated

3M™ Oversleeve 445



Head Wear

3M™ Overhood 446



- Made of the same microporous laminated material as the Type 5/6 3M™ Protective Coverall 4510
- Anti-static treated
- Drapes over the shoulders offering excellent coverage

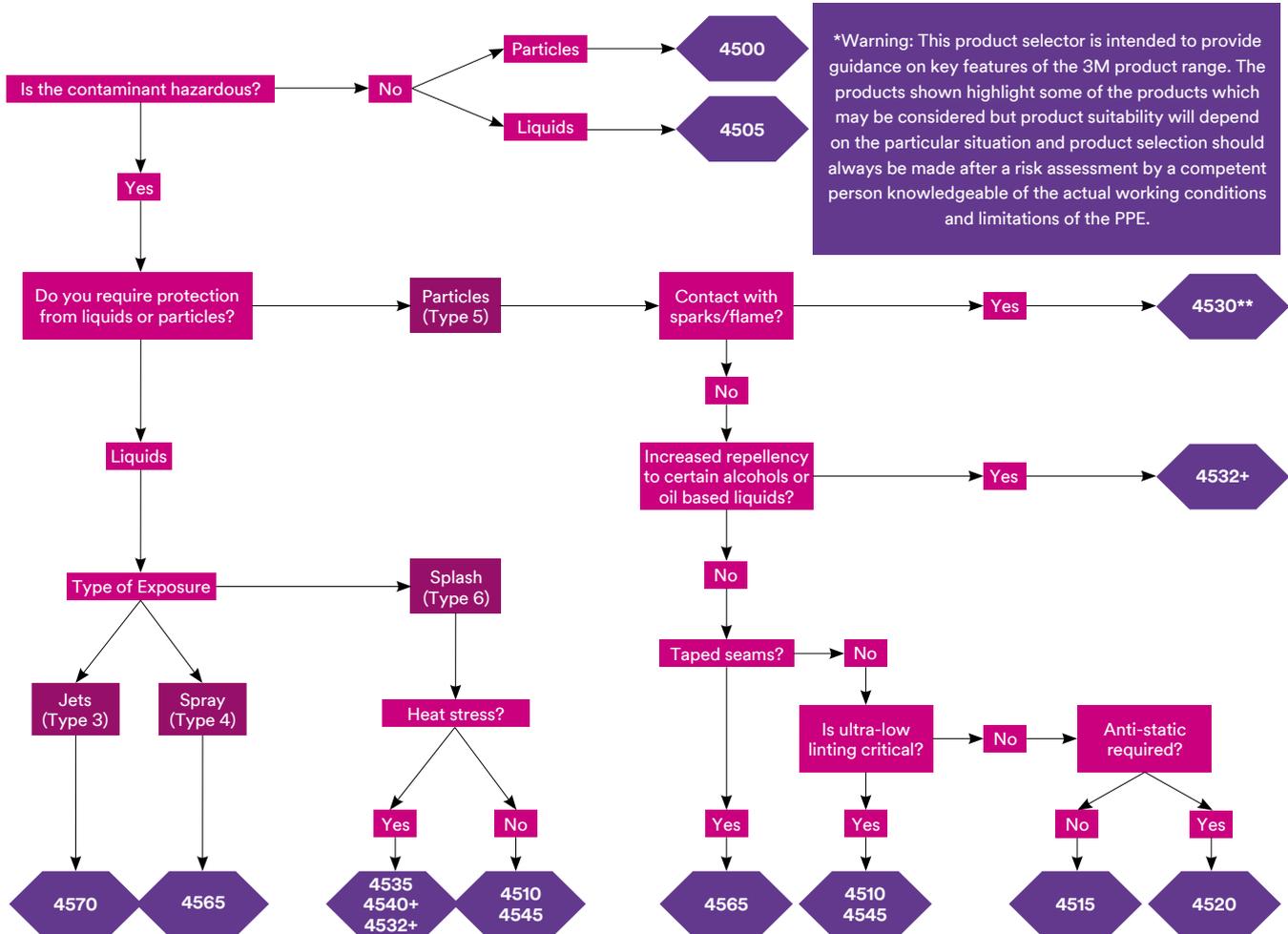
3M™ Mob Cap 407



- Hygiene protection preventing contamination from hair in the working environment
- Universal size
- Made from soft and breathable polypropylene



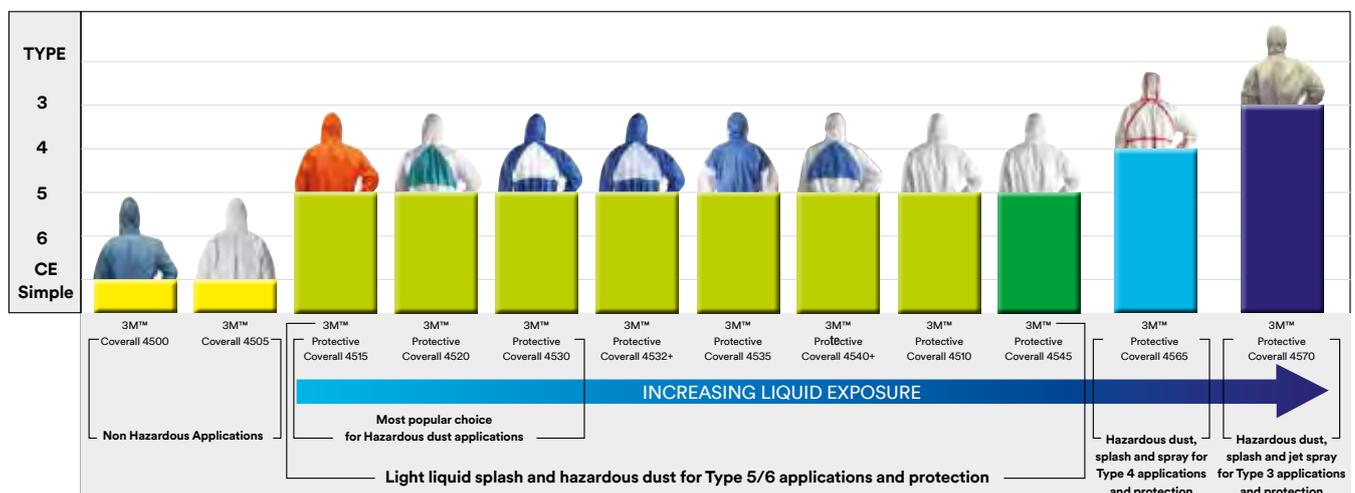
Product selector diagram*



*Warning: This product selector is intended to provide guidance on key features of the 3M product range. The products shown highlight some of the products which may be considered but product suitability will depend on the particular situation and product selection should always be made after a risk assessment by a competent person knowledgeable of the actual working conditions and limitations of the PPE.

**Not suitable for flame protection, to be used in conjunction with an Index 2/3 garment only

3M™ Protective Coveralls Protection Types



This guide is only an outline. It should not be used as the only means for selecting protective clothing. Always read and follow all user instructions supplied with your 3M™ Protective Coveralls in order to ensure correct operation. Final determination as to the suitability of these products for a particular situation is the employers responsibility. If in doubt contact a safety professional. For further information on the performance data of these garments or for any other questions contact your local 3M representative. **LIMITATION OF LIABILITY:** Except as provided above, 3M shall not be liable or responsible for any loss or damage, whether direct, indirect, incidental, special or consequential arising out of the sale, use or misuse of 3M PSD products, or the user's inability to use such products.



Product selector table*

	3M	4500	4505	4510	4515	4520	4530	4532+	4535	4540+	4545	4565	4570
	Category 1	Category 1	Category 3										
CE Certification**													
Material Weight		45gsm	67gsm	47gsm	50gsm	43gsm	54gsm	52gsm	55gsm	49gsm	49gsm	49gsm	92gsm
Size		S-4XL	M-XXL	S-4XL	S-4XL	S-4XL	S-4XL	S-4XL	S-3XL	S-4XL	S-4XL	S-4XL	S-4XL
Colours													
Light-duty cleaning, warehousing, janitorial		●	●		●								
Asbestos inspection, site preparation, insulation				●	●	●	●	●	●	●	●	●	
Asbestos removal				●	●	●	●	●	●	●	●	●	
Cement manufacturing, metal grinding & polishing				●	●	●	●	●	●	●	●	●	
Light industrial cleaning, machine maintenance				●	●	●	●	●	●	●	●	●	
Pharmaceutical processing, handling toxic powders				●	●	●	●	●	●	●	●	●	
Painting & coating, resins				●			●	●	●	●	●	●	
Cleanrooms				●							●	●	
Pesticide spraying												●	●
Chemical mixing and handling												●	●
Chemical spills, emergency response, decontamination, tank cleaning													●

● Popular choice ● Suitable for consideration

* In all cases, product selection should be based on a full risk assessment. Always read product user information. Use limitations and performance data should be considered to ascertain the protection required. If in doubt, contact a safety professional. This guide is only an outline. It should not be used as the only means for selecting protective clothing. Details regarding performance and limitations are set out on the packaging and user instructions. Before using any protective clothing, the wearer must read and understand the user instructions for each product. Specific country legislation must be observed. If in doubt, contact a safety professional or 3M – www.3m.eu/safety. Always check the compatibility of the suit material before selection. Please note that the personal protective equipment (PPE) shown highlight some of the products which may be considered. Sections of the most appropriate PPE will depend on the particular situation and should be made only by a competent person knowledgeable of the actual working conditions and the limitations of PPE.

** See user instructions or technical datasheets for full details.

*** Material meets standard requirements.



3M™ Scotchlite™ Reflective Materials

Visibility is a major factor in keeping people safe, that is why Scotchlite has been designed with retro-reflective materials which increase the visibility of people at any time of day, not only under low light conditions.

There are many uses for 3M™ Scotchlite™ Reflective Materials, ranging from fun sports and leisure wear to highly durable work wear. Day or night whatever the weather, Scotchlite can help increase the visibility of you, your family or your employees.



The Evolution of Visibility



Retro-Reflective Technology

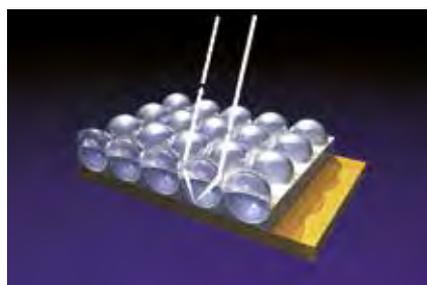
Combining versatility, functionality and fashion, 3M™ Scotchlite™ Reflective Materials make use of a physical process known as retro-reflection. Millions of small glass spheres or micro-prisms reflect incident light directly back towards the original light source, such as vehicle headlights. The obvious advantage is that a person wearing Scotchlite reflective material can be seen better and sooner by a vehicle driver, who has more time to react or take evasive action and many accidents can be avoided.

The materials are easy to process and there are many creative possibilities. Scotchlite reflective material can be sewn onto garments, simply applied using a heat transfer or welding process, woven into textiles or attached with an adhesive to other surfaces.

Two different technologies are used in our range of retro-reflective materials.

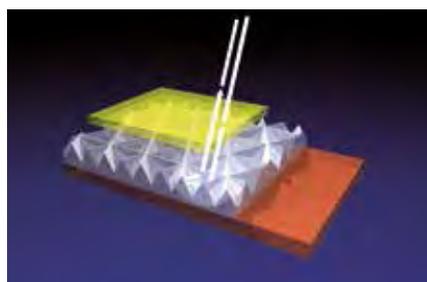
Glass Bead/Lens Technology

Scotchlite reflective materials incorporating glass bead technology utilise millions of high performance glass beads that reflect light very effectively from all directions due to their spherical nature.



Features and Benefits:

- Very comfortable to wear. The reflective material forms an integral part of a garment, providing freedom of movement, easy storage and folding
- Includes a range of materials that are able to withstand high temperature washing up to 92°C
- Can be dry-cleaned and ironed
- Cost effective
- Available in sew-on, heat-applied and self adhesive options



Microprismatic Technology

3M™ Scotchlite™ Reflective Materials High Gloss Series incorporates retro-reflective microscopic prisms formed on a polymeric film to create a bright reflective appearance on garments and accessories.

Features and Benefits

- Is available in different colours
- Can be washed at 60°C up to 75 times.
- Provides an attractive, high gloss finish.
- Can be sewn or welded onto garments.



Workwear Reflective Solutions

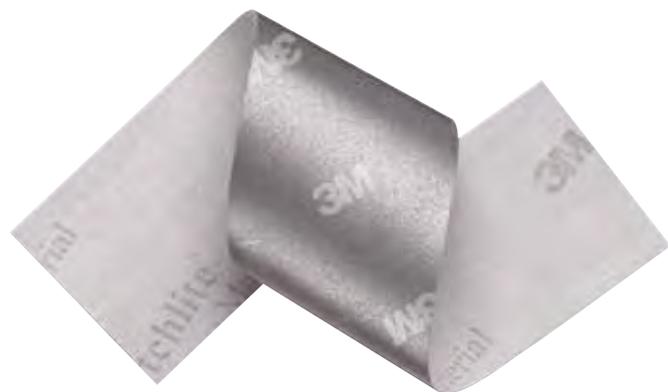
Visibility by day and night is an important aspect for workers who are exposed to dangers from moving vehicles and mechanised equipment during their daily work.

3M™ Scotchlite™ Reflective Material can be used in many different occupational fields, such as fire-fighting, rescue services, road construction and garbage collection. It improves visibility and safety in low light situations and at night. The superior quality and performance of Scotchlite reflective materials ensure lasting functionality for many years; even under harsh conditions, our products will not let you down.



The wide range of different Scotchlite reflective materials is designed to provide enhanced visibility, improving the safety of the wearer, without compromising on the functionality or performance of the garment on which they are used. As end-users demand additional properties or wash durability from their high-visibility garments, such as flame resistance, industrial laundrability or chemical resistance, they can be confident that there's a Scotchlite reflective material solution for their application.

3M has demonstrated its commitment to worker safety and comfort with the introduction of 3M™ Scotchlite™ Reflective Material – 5500 Series Comfort Trim including a new segmented flame resistant transfer film. The unique design of the segmented trim provides improved moisture vapour transmission, compared to solid trims, so that workers can stay dryer and cooler, while the increased flexibility makes garments more comfortable to move in.



To verify its authenticity, certain 3M™ Scotchlite™ Reflective Material products have an embedded 3M logo visible on the silver surface where it can easily be seen, even on a completed garment.

Protecting our trademarks is extremely important at 3M, and authenticating our product with the 3M logo is one measure we take so you always know you're getting what you specified.

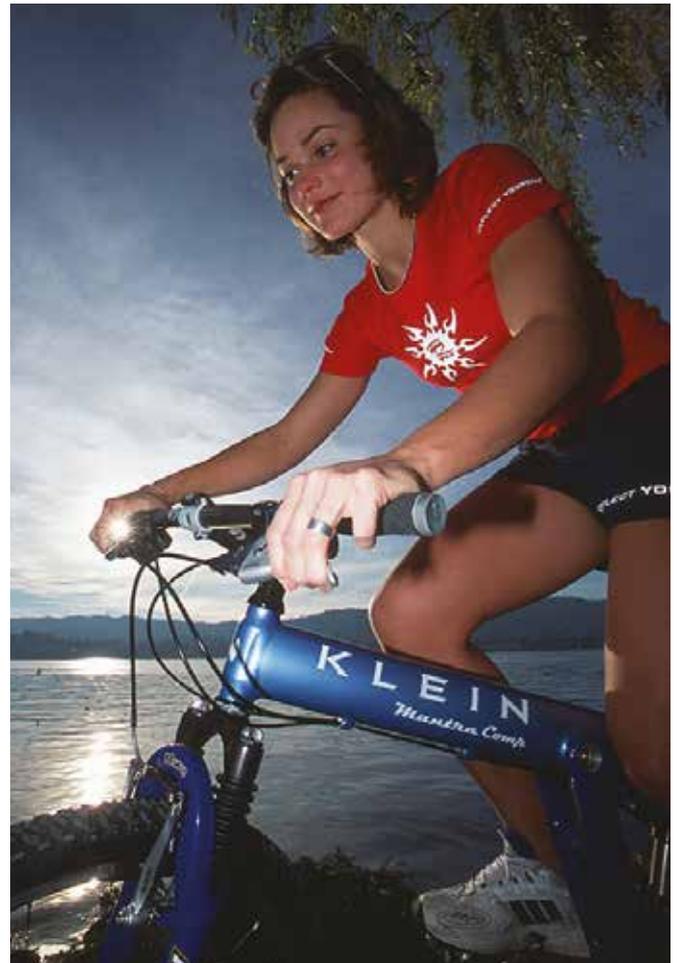


Fashion & Lifestyle Reflective Solutions

In road traffic, pedestrians such as schoolchildren, joggers, cyclists, horse-riders and older people are especially vulnerable. The safety of all pedestrians and other road-users can be improved with 3M™ Scotchlite™ Reflective Material, because they can be seen better and sooner by car drivers, thus helping to prevent accidents.

Whether you're designing headwear or footwear or anything in between, it's easy to achieve the right value and performance with 3M™ Scotchlite™ Reflective Material – Consumer Solutions. This new line of products from 3M™ Scotchlite™ Reflective Material is made specifically for the needs of the apparel industry. Choose from a variety of designer-friendly transfer films and fabric solutions that can be easily converted to your requirements.

There is a reason why 3M™ Scotchlite™ Reflective Materials is used extensively in the worldwide market for occupational workwear and high visibility safety wear. It's earned the trust of firefighters, construction personnel, paramedics and other workers whose on-the-job safety depends on being seen, delivering high performance in rigorous conditions throughout the life of a garment. You can bring that same level of trusted quality and performance to your apparel, footwear and accessories with Scotchlite reflective material - consumer solutions products.



Scotchlite reflective material is not only functional, but also a key design element in outdoor fashion today.





Product Overview



Product	Colour	Product Features	
Fabrics			
2910	Silver	100% polyester backing, for limited-wash vest applications (is not branded Scotchlite™)	 
2925	Silver	100% polyester backing, vest applications, soft hand, discrete 3M logo on reflective face (is not branded Scotchlite™)	 
8906	Silver	Fabric backing: 70% PES, 30% cotton, excellent drapability and smooth hand	 
8912	Silver	Fabric backing: 65% PES, 35% cotton, excellent drapability, discrete 3M logo on reflective face	       
8925	Silver	Fabric backing: 65% PES, 35% cotton, improved resistance against abrasion and chemicals, wash durability	      
8965	White	Fabric backing: 65% PES, 35% cotton, sublimation printability	    
C925	Silver	Fabric backing: cotton/polyester blend, intended for diverse applications on leisure, fashion and sports wear	   
Industrial Wash Fabrics and Transfer Films			
9910	Silver	Fabric backing: 100% PES, industrial wash, tumble drying, enhanced resistance against abrasion and chemicals	      
9920	Silver	Fabric backing: 100% PES, industrial wash, tumble drying and tunnel finishing, enhanced resistance against abrasion and chemicals	      
9720	Silver	Transfer films: industrial wash, tumble drying and tunnel finishing, enhanced resistance against abrasion and chemicals	      
Flame Resistant Fabrics and Transfer Films			
5535	Silver	Segmented flame resistant trim for workwear with improved moisture vapour transmission and comfort	   
8735	Silver	Flame resistant transfer film, enhanced resistance against abrasion and chemicals	     
8935	Silver	Fabric backing: 100% cotton, flame resistant, enhanced resistance against abrasion and chemicals	   
8940	Silver	Aramid backing, industrial wash, flame resistant, enhanced resistance against abrasion and chemicals	    
8986 NFPA	Red-orange	Fabric backing: 100% cotton, flame resistant, fluorescent and reflective	  
8987 NFPA	Lime-yellow	Fabric backing: 100% cotton, flame resistant, fluorescent and reflective	  
Fire Coat Trims			
9686	Silver-red-orange	Aramid fabric, flame resistant, fluorescent red-orange, silver reflective centred stripe with discrete 3M logo	 
9687	Silver-lime-yellow	Aramid fabric, flame resistant, fluorescent lime-yellow, silver reflective centred stripe with discrete 3M logo	 





Product	Colour	Product Features	
Transfer Films			
5510	Silver	Segmented trim for occupational garments, improved moisture vapour transmission, comfort and wash performance	
5807	Silver	Custom-cuttable for reflective graphics and logos, heat-activated transfer film	
8711	Silver	Heat activated adhesive, elastic, can be printed directly	
8712	Silver	Heat activated adhesive, improved aesthetics after wash, with discrete 3M logo on reflective face	
8725	Silver	Heat activated adhesive, improved resistance to abrasion and chemicals, improved aesthetics after wash, with discrete 3M logo on reflective face	
8725LL	Silver	Heat activated adhesive, improved resistance to abrasion and chemicals, improved aesthetics after wash, with discrete 3M logo on reflective face, without paper liner	
8726	Silver	Heat activated adhesive, improved resistance to abrasion and chemicals, wash durability	
8726LL	Silver	Heat activated adhesive, improved resistance to abrasion and chemicals, wash durability, without paper liner	
8787	Lime-yellow	Heat activated adhesive, fluorescent lime-yellow combined performance material	
C725	Silver	Heat activated adhesive, improved aesthetics after wash, intended for diverse applications on leisure, fashion and sports wear	
C750	Silver	Heat activated adhesive, improved aesthetics after wash, intended for diverse applications on leisure, fashion and sports wear	
Marking Films			
8850	Silver	Pressure sensitive adhesive (PSA), non-washable	
High Gloss Trims			
7160	White	Ready to be sewn on, can be printed	
7180	Silver-grey	Ready to be sewn on, can be printed	
7187	Lime-yellow	Ready to be sewn on, coloured retroreflection, can be printed, fluorescent and reflective	
7196	Red-orange	Ready to be sewn on, coloured retroreflection, can be printed, fluorescent and reflective	
High Gloss Films			
6260 / 6260R	White	Sewing, welding, cutting, can be printed	
6287 / 6287R	Lime-yellow	Sewing, welding, cutting, coloured retroreflection, can be printed, fluorescent and reflective	
6296	Red-orange	Sewing, welding, cutting, coloured retroreflection, can be printed, fluorescent and reflective	
High Gloss Sparkle Films			
6560	White	Sewing, welding, cutting, can be printed, sparkling appearance	

Notes



Sorbents

From simple maintenance tasks, to cleaning up dangerous spills, sorbents help to make sure that your workplace is kept clean and safe and they help reduce damage to the environment. Split into three key categories, maintenance, oil and chemical, 3M™ Sorbents are available in a variety of formats so you can choose the best option for your needs.



Different Types of Sorbents

3M™ Maintenance Sorbents – ideal for absorbing oil and other industrial fluids cleanly, safely and efficiently.

3M™ Oil Sorbents – for absorbing oil not water. Being hydrophobic (water repellent) they are ideal for absorbing oil from areas where water may also be present.

3M™ Chemical Sorbents – an ideal solution for hazardous spill control. They provide very high absorption capacities and are suitable for absorbing a very wide range of liquids – even aggressive acids and alkalis.

Different Formats of Sorbents

Sorbents by 3M are available in a variety of formats, so you can choose the format that meets your needs.

Rugs

Ideal for use in walkways near leaky machines. The rugs are highly durable and tear resistant, withstanding heavy foot-traffic and soaking up liquids without breaking up.

Minibooms – Pillows

Ideal for placing around the base of leaking machinery/equipment to contain and absorb oils and cutting fluids.

Multi-Format

All your sorbent needs from one box. This versatile product is four formats rolled into one.

Pads and Rolls

Designed to be used in and around the work area to catch leaks and drips, pads are highly absorbent and simple to use.

Hazardous Spill Response Kits

3M™ Chemical Spill Kits each contain a carefully selected variety of chemical sorbents. These convenient kits assist with providing fast and effective containment and clean-up of hazardous spills.

Tanker Spill Response Kits

The modern and effective way to control and clean up spills resulting from liquid fuel deliveries.

Symbol Key

Throughout this section of the brochure you'll notice the symbols shown below. These symbols indicate which sorbents can and cannot be used with different fluids.



For use with
oil-based products



For use with
water-based products



For use with
chemical-based
products



Not for use with

Multi-Format Sorbents Application Guide



Carry



Tear



Around corner



Unfold



Unopened



Open





3M™ Maintenance Sorbents



For leaks and drips of non aggressive fluids. 3M Maintenance Sorbents are ideal for absorbing oil and other industrial fluids cleanly and efficiently. They are lightweight and very quick to deploy. They are long lasting and highly absorbent (up to 25 x their own weight) absorbing most fluids very quickly. 3M maintenance sorbents are not suitable for absorbing aggressive liquids.

Maintenance sorbents by 3M are made from inert, synthetic fibres principally of polypropylene and polyester. They are available in a large range of formats and are lightweight and dust free. They have a high absorption capacity which minimises the amount of waste for disposal.

Features and Benefits:

Ventilation

- Promotes a cleaner, safer working environment
- Very easy to use and to retrieve
- Reduces the risk of contamination of finished products
- Reduces the risk of damage to valuable machinery
- Significantly less waste to dispose of

Applications:

- Industrial machinery leaks, drips, spills and splashes of non-aggressive maintenance fluids
- Wiping down oily tools and equipment
- Tabletops and under work surfaces
- Indoor vehicle/equipment parking areas – fork trucks, compressors, and lift equipment
- Areas where an oily mist is problematic
- Under oily machined metal parts while they drip off prior to packing and shipping



3M™ M-M1002 Maintenance Sorbent Mini-Boom

Product overview

Product	Number	Size (CM)	No./case	Case sorbency (litres)	Case weight (kg)
Multiformat	M-F2001	12 x 1520	3	119	8.2
Pads	M-A2002	40 x 52	100	142	6.4
Rolls	M-B2001	40 x 4600	1	117	5.9
	M-B2002	96 x 4600	1	288	13.6
Drum Covers	M-R2001	56ø	25	72	3.6
Minipillows	M-N1001	18 x 38	16	32	3.3
	M-M1001	7.6ø x 120	12	45	5.5
Minibooms	M-M1002	7.6ø x 240	6	45	5.5
	M-M1003	7.6ø x 370	4	45	5.5
Rug (uncoated)	M-G1001	91 x 9100	1	120	25.0
Rug (coated)	M-G1301	91 x 3000	1	40	10.5

Other 3M™ Maintenance Sorbents



3M™ M-F2001 Multi-Format Maintenance Sorbent



3M™ M-N1001 Maintenance Sorbent Pillow



3M™ M-A2002 Maintenance Sorbent Pad



3M™ M-B2001 Maintenance Sorbent Roll



3M™ M-G1001/M-G1301 Maintenance Sorbent Rugs



3M™ M-R2001 Maintenance Sorbent Drum Cover, High Capacity Case



3M™ Oil Sorbents



3M Oil Sorbents are an innovative range of highly absorbent products. Being hydrophobic or water repellent they are ideal for absorbing oil from places where water may also be present.

synthetic fibres, principally polypropylene for 'T' oil sorbents and polypropylene and polyester for 'HP'. They are available in a wide range of formats and are lightweight and dust free. They have a high absorption capacity which minimises the amount of waste for disposal. HP antistatic products have a charge dissipating polypropylene scrim and are packaged in charge-dissipating film.

As with 3M™ Maintenance Sorbents, Oil Sorbents are available in a wide range of convenient formats – each designed to enhance spill management and maximise pollution control. Oil Sorbents are made from inert,

Features and Benefits:

- Hydrophobic
- Cost-effective as oil, not water, is recovered
- Can be used outside as well as in-plant
- Handy dispenser box for easy on-site use

Applications

- Controlling, cleaning up and recovering oil and petroleum based liquids from effluent discharge, streams, ponds, lakes, rivers, and other bodies of water
- In-plant spills under leaking equipment and machinery in place of clay granules
- In drains and sumps to collect petroleum products from runoff



3M™ T-F2001 Multi-Format Oil Sorbent

As with all Multi-Format Products by 3M, Multi-Format oil sorbent combines the convenience and versatility of four sorbents in one. Offering high absorbency and rapid deployment, it can be used as a boom, pillow, pad or roll. With perforations every 40cm it allows you to select the length that you need, resulting in less wastage.

Other 3M™ Oil Sorbents



**3M™ T100/T150
Oil Sorbent
Roll**



**3M™ T151/T156
Oil Sorbent
Sheets**



**3M™ T4/T8/T12
Oil Sorbent
Mini-Boom**



**3M™ T30
Oil Sorbent
Pillow**



**3M™ T126
Oil Sorbent
Sweep**



**3M™ T270/T280
Oil Sorbent
Boom**

Product overview

Product	Number	Size (CM)	No./case	Case sorbency (litres)	Case weight (kg)
Sheets	T151	53 × 39	200	150	8.5
	T156	53 × 39	100	135	7.5
	HP156	48 × 43	100	142	4.5
	HP-255	47 × 47	50	124	5.0
	HP556 antistatic	48 × 43	100	142	4.5
	HP557 antistatic	96 × 86	50	238	9.0
Rolls	T100	96 × 4000	1	276	15.0
	T150	48 × 4000	1	138	7.5
	HP100	96 × 4400	1	276	9.0
Pillows	T30	18 × 38	16	32	3.3
	T240	38 × 55	10	100	10.5
Booms	T270	20ø × 300	4	260	22.0
	T280	2 × 10ø × 300	4	152	11.0
	T270GA	20ø × 500	2	220	17.0
Minibooms	T4	7.5ø × 120	12	45	5.5
	T8	7.5ø × 240	6	45	5.5
	T12	7.5ø × 370	4	45	5.5
Sweep	T126	48 × 3000	1	95	7.5
Particulate	T210	–	–	75	7.5
Multiformat	T-F2001	12 × 1520	3	119	8.2



3M™ Tanker Spill Response Kits



The modern and effective way to control and clean up spills, particularly those resulting from liquid fuel deliveries. Best practice recommends that during the delivery and unloading of petrol, a suitable quantity of absorbent material must be

available as a contingency against spills. Tanker Kits by 3M can satisfy this by ensuring a rapid and effective solution to spills of this nature.

Features and Benefits:

- Easily stowed in confined areas, e.g. behind the drivers seat
- Immediately deployable
- Two convenient sizes (3M™ TSK15, absorbency 15 litres and 3M™ TSK30, absorbency 30 litres)
- Mini-booms for containment
- Easy to dispose of – disposal bags and ties included
- Absorbs solvents, oils and hydrocarbons



3M™ TSK 30 Tanker Spill Response Kit

Product overview

3M™ TSK 30 Kit Contains:	3M™ TSK 15 Kit Contains:
50 Sheets – 48 cm x 43 cm	25 Sheets – 48 cm x 43 cm
2 Minibooms – 7.5 cm x 1.2 cm	2 Pillows – 18 cm x 38 cm
1 Disposal bag and tie	1 Disposal bag and tie
1 Disposal guide and label	1 Disposal guide and label
Absorbency per kit: 30 litres	Absorbency per kit: 15 litres
Particulate	T210
Multiformat	T-F2001

Other 3M™ Tanker Spill Response Kits

3M™ TSK 15 Tanker Spill Response Kit



Application and Directions for Use



Small spills can be covered with the oil sorbent sheets.



For larger spills, contain the spill by surrounding the liquid with oil sorbent minibooms. To prevent seepage ensure they are overlapped.



Add sheets to absorb the contained liquid pool.



Oil Sorbent Minibooms can also be used to prevent flow of spills into drains.



Also use sheets to wipe off any contaminated surfaces.



Used sorbents should be placed in the temporary disposal bags provided and sealed with plastic tie.



3M™ Chemical Sorbents

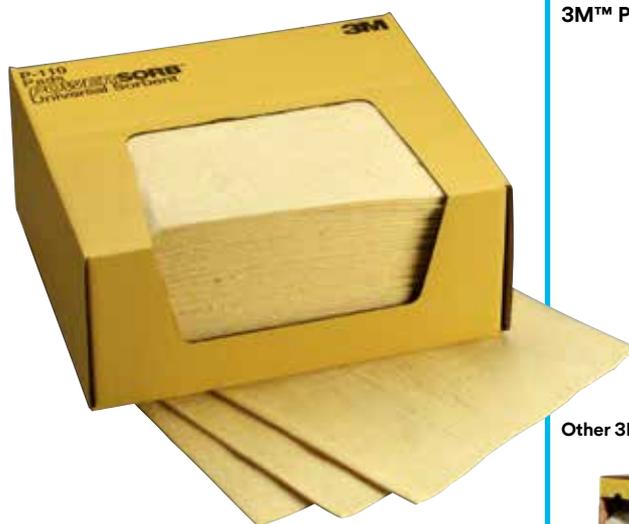


3M Chemical Sorbents are the ideal solution for hazardous spill control. Available in a wide range of formats – including our spill kits – they provide very high absorption capacities and are suitable for absorbing a very wide range of liquids –

even aggressive acids and alkalis. 3M™ chemical sorbents are convenient and rapid to deploy, major considerations in an emergency.

Features and Benefits:

- Promotes safety on the site
- Immediate response to chemical spillages
- Fast and effective containment and clean-up
- Suitable for use with most chemicals
- Easy to dispose of
- Available in several formats including mini-booms, pillows, sheets and rolls
- Products have a high capacity
- Can be used with many aggressive chemicals



3M™ P110 Chemical Sorbent Sheet

Product overview

Product	Number	Size (CM)	No./case	Case sorbency (litres)	Case weight (kg)
Sheets	P110	28 × 33	200	50	6.5
Rolls	P130	33 × 3000	2	50	6.0
	P190	48 × 3000	2	72	8.6
Pillows	P300	18 × 38	16	32	3.3
Minibooms	P200	7.5ø × 120	12	45	5.5
Particulate	P500	(5.4Kg)	–	54	5.4
Multiformat	P-F2001	12 × 1520	3	119	8.2

Other 3M™ Chemical Sorbents



3M™ P-F2001
Multi-Format
Chemical Sorbent



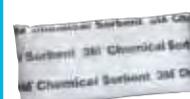
3M™ P130
Chemical Sorbent
Roll



3M™ P190
Chemical Sorbent
Roll



3M™ P200
Chemical Sorbent
Mini-Boom



3M™ P300
Chemical Sorbent
Pillow





3M™ Hazardous Spill Response Kits



3M Hazardous Spill Response Kits each contain a carefully selected variety of 3M™ Chemical Sorbents. Available in five configurations, these convenient kits assist with providing fast and effective containment and clean-up of hazardous spills.

3M™ Hazardous Spill Response Kits

- Cleaning up hazardous chemical spills, drips, and leaks
- Ideal for rapid response containment and cleanup
- Hazardous material shipping
- Cover bench tops in anticipation of a spill
- Wiping up contaminated areas.



3M™ DRSK-DP Disposable Spill Kit

An innovative way of dealing with everyday spills quickly and easily. Everything you need in one kit!

- Unique design allows safer clean up – less risk of injury
- Specially designed brush means no need to handle glass and the dustpan kit seals reducing exposure to broken glass
- Absorbs up to 1.5 Litres



3M™ SK75 Chemical Spill Kit

3M™ DRSK-DP Disposable Spill Kit
Contains 4 disposable spill kits with dispenser, 2 Multifomat sheets, Nitrile gloves, Dustpan and Brush, and a Disposable Bag and Tie per kit.

Product overview

	SK360	SK210	SK75	SK26	SK5
Kits contain:					
P110 Sheets	300	100	100	10	10
P300 Pillows	24	12	12	5	1
P200 Mini-Booms	24	12	8	5	-
P190 Roll	1	1	-	-	-
PF-2001 Multi-Format	3	2	-	-	-
Disposal bag and ties	20	10	5	2	1
Warning Sign	1	1	-	-	-
Warning Tape	1	1	-	-	-

Other 3M™ Chemical Sorbent Kits



3M™ SK 5 Chemical Spill Kit



3M™ SK 26 Chemical Spill Kit



3M™ SK 360 Chemical Spill Kit



3M™ SK 210 Chemical Spill Kit

Notes



3M™ Floor Safety

Every year, thousands of people are injured by slips and trips in the workplace, at great cost to their personal health and to their employer's reputation and bottom line.

Many of these risks are entirely preventable with 3M™ Safety-Walk™ Anti-Slip Tape – a high performance anti-slip flooring tape that is designed to keep your workers safe and productive, whilst lowering your compensation and insurance costs.



Are your floors up to Standard?

Stairways, ladders, ramps, walkways, machinery, kitchens, showers and changing rooms are all potential areas of risk. In particular, slippery surfaces caused by wet, greasy or oily floors are a major contributor to accident statistics.

Compliance with EC Directive 89/654 on floor safety helps you to minimise risk, limit costly down-time, and reduce your financial liability. It can also save lives.



3M™ Safety-Walk™ General Purpose – 600 Series

For light to heavy shoe-traffic areas

Safety-Walk General Purpose is a mineral-coated, abrasive material adhered by a durable resin to a pressure-sensitive adhesive backed plastic film. It provides an effective slip-resistant surface in most shoe traffic applications.

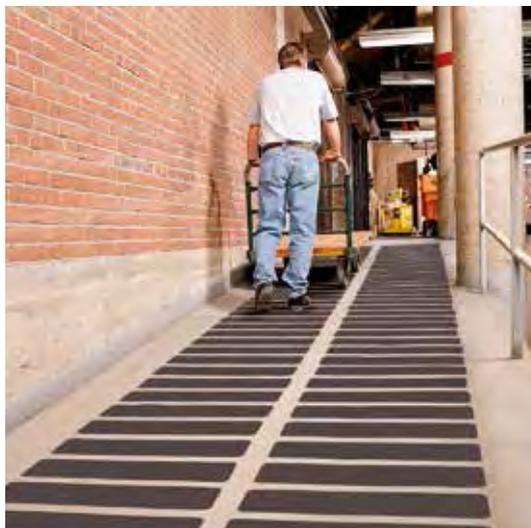
Features and Benefits:

Application

- It is used for all slippery surfaces with intensive pedestrian and light vehicle traffic; for example, stairways, production and storage rooms, ramps, ladders and machine footplates

Surfaces

- It is particularly effective on concrete (painted or primed), resilient tile, metal and porous surfaces if primed



General Purpose 600 Series at a glance

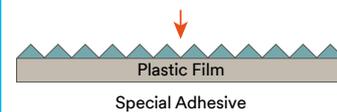
- Mineral-coated, high friction slip-resistant surface
- High performance press-sensitive adhesive for easy application
- For light to heavy shoe-traffic areas
- Low-profile design helps reduce trip hazard
- Highly durable surface which withstands the rigours of equipment traffic

Colours

- Black (610)
- Green (640)
- Clear (620)
- Brown (660)
- Yellow (630)

Product construction

Mineral Particles for permanent slip resistance in all applications





3M™ Safety-Walk™ Coarse – 700 Series

In extreme conditions

Safety-Walk Coarse contains extra large mineral particles bonded by a tough durable polymer to a dimensionally stable plastic film. This durable construction provides additional slip resistance in extreme conditions and its open abrasive pattern resists clogging when oil and mud are present.

Features and Benefits:

Application

- It is used on agricultural and forestry equipment, ship and plane decks, trains, oily wet areas, machine shops, construction vehicles, platforms and ramps

Surfaces

- It is particularly effective on concrete (painted or primed), resilient tile, metal and porous surfaces if primed



Coarse 700 Series at a glance:

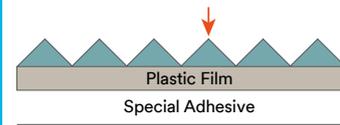
- Extra large abrasive mineral particles provide a stable slip-resistant surface even in the presence of water or oil
- Open abrasive pattern resists clogging and reduces clean up time
- For extreme, heavy traffic areas
- High performance adhesive creates excellent bond to most surfaces

Colours

- Black (710)

Product construction

Extra strong mineral particles to prevent clogging in dirty and oily applications



3M™ Safety-Walk™ Conformable – 500 Series

On irregular or contoured surfaces

Safety-Walk Conformable is a high-friction, slip-resistant material that has a special pressure-sensitive adhesive backed aluminium film that conforms and adheres to irregular surfaces.

Features and Benefits:

Application

- It is especially suited to uneven and contoured surfaces (e.g. diamond plate). It is used on steps and stairwells, ladder rungs and fire escapes

Surfaces

- It is specially designed for textured surfaces and textured porous surfaces (if primed)



Conformable 500 Series at a glance:

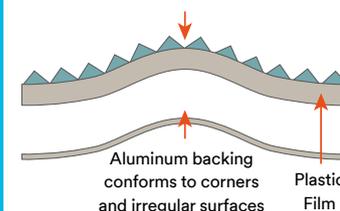
- Mineral-coated, high friction slip-resistant surface
- Aluminium backing conforms to corners, curves and irregular surfaces
- Aggressive, high performance adhesive forms an excellent bond for a secure hold
- For irregular or contoured surfaces in light to heavy shoe-traffic areas
- Safety yellow colour for high visibility and easy identification of hazard areas

Colours

- Black (510)
- Yellow (530)

Product construction

Mineral Particles for permanent slip resistance in all applications





3M™ Safety-Walk™ Medium Resilient – 300 Series

In barefoot or light shoe traffic areas

Safety-Walk Medium Resilient is a soft textured, non-mineral, medium resilient surface bonded to a pressure-sensitive adhesive backed plastic film. It provides a comfortable, hygienic, slip-resistant covering.

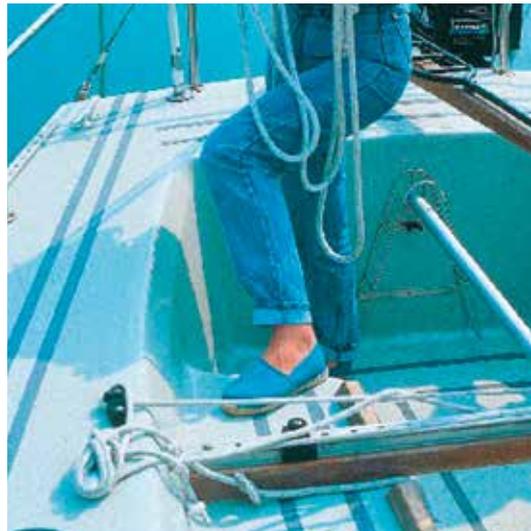
Features and Benefits:

Application

- It is ideal for barefoot or light shoe traffic areas and wet areas such as boats and watersports equipment, locker rooms, around tubs and pools

Surfaces

- It is particularly effective on concrete (painted or primed), resilient tile, smooth metal, fibreglass and porous surfaces if primed



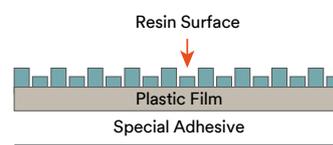
Medium Resilient 300 Series at a glance:

- Non-mineral, medium textured, slip-resistant vinyl surface
- Textured resilient high friction surface and durable adhesive provide long-lasting performance
- For barefoot or shoe-traffic areas

Colours

- Black (310)
- Grey (370)

Product construction



3M™ Safety-Walk™ Fine Resilient – 200 Series

In wet, barefoot-traffic areas

A fine textured, slip-resistant vinyl surface with a pressure-sensitive adhesive backing. It provides enhanced safety and comfort in light and barefoot traffic areas.

Features and Benefits:

Application

- It is ideal for barefoot and wet areas, shower rooms, baths, changing rooms and around saunas

Surfaces

- It is particularly effective on concrete or other porous surfaces (if primed, painted or sealed), ceramic tile, fibreglass and smooth metal



Fine Resilient 200 Series at a glance:

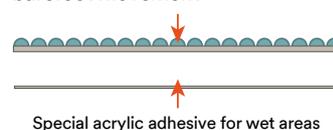
- Non-mineral, fine textured, slip-resistant vinyl surface
- Its high performance, water resistant, acrylate adhesive is ideal for wet conditions
- For wet, barefoot traffic areas

Colours

- White (280)
- Clear (220)

Product construction

Finely textured surface for barefoot movement





3M™ Safety Matting

3M also has a range of mats that have been specifically created to overcome a number of specialist issues, such as wet areas, anti-fatigue for production sites and anti-contamination mats for clean working areas.

3M™ Nomad™ Terra Primary Matting (Outdoor)

Made from durable material, 3M™ Nomad™ Terra entrance matting is available in a variety of styles to handle different traffic levels

- Open web construction
- Flexible coils to brush shoe soles
- Place them inside, outside or in recessed wells
- Attractive matt finish in a range of colours
- Available without backing to aid drainage in outdoor areas or with vinyl backing to protect floors indoors
- High-tech product coating adds durability
- Highly crush resistant vinyl



3M™ Contamination Control Mat

A disposable, dust collecting floor mat designed to help protect areas where cleanliness and hygiene are critical factors

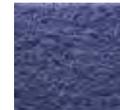
- High tack surface removes dust and small particles from shoe soles and trolley wheels
- Peel off one layer to expose the next
- Lay onto any clean surface with no edging or frame
- 40 sheets coated with a pressure-sensitive adhesive



3M™ Safety-Walk Wet Area Matting 1500

An unbacked, unwoven open matting made from continuous vinyl filaments

- Use as a comfort cushion in wet area applications
- Suitable for barefoot or shoe traffic
- Overall thickness 9.0mm



3M™ Safety-Walk Wet Area Matting 3200

Flexible open mesh structure allows water to run through so the surface stays drier than the surrounding area

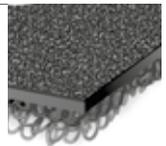
- Comfortable for bare feet
- Formulated for resistance to chlorinated water, body oils, fungus, mildew and UV radiation
- Overall thickness 6.0mm



3M™ Safety-Walk Cushion Matting

Reduces leg and back fatigue by distributing cushioned support across the bottom of the shoe

- Flat topped vinyl anti-fatigue matting
- Textured top helps improve traction and clean up of debris and liquid
- 5270E Available with edging to allow wheeled traffic. Oil and grease resistant; suitable for heavy duty foot traffic environments
- 3270E Oil and moderate chemical resistance; suitable for heavy duty foot traffic environments



Notes

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