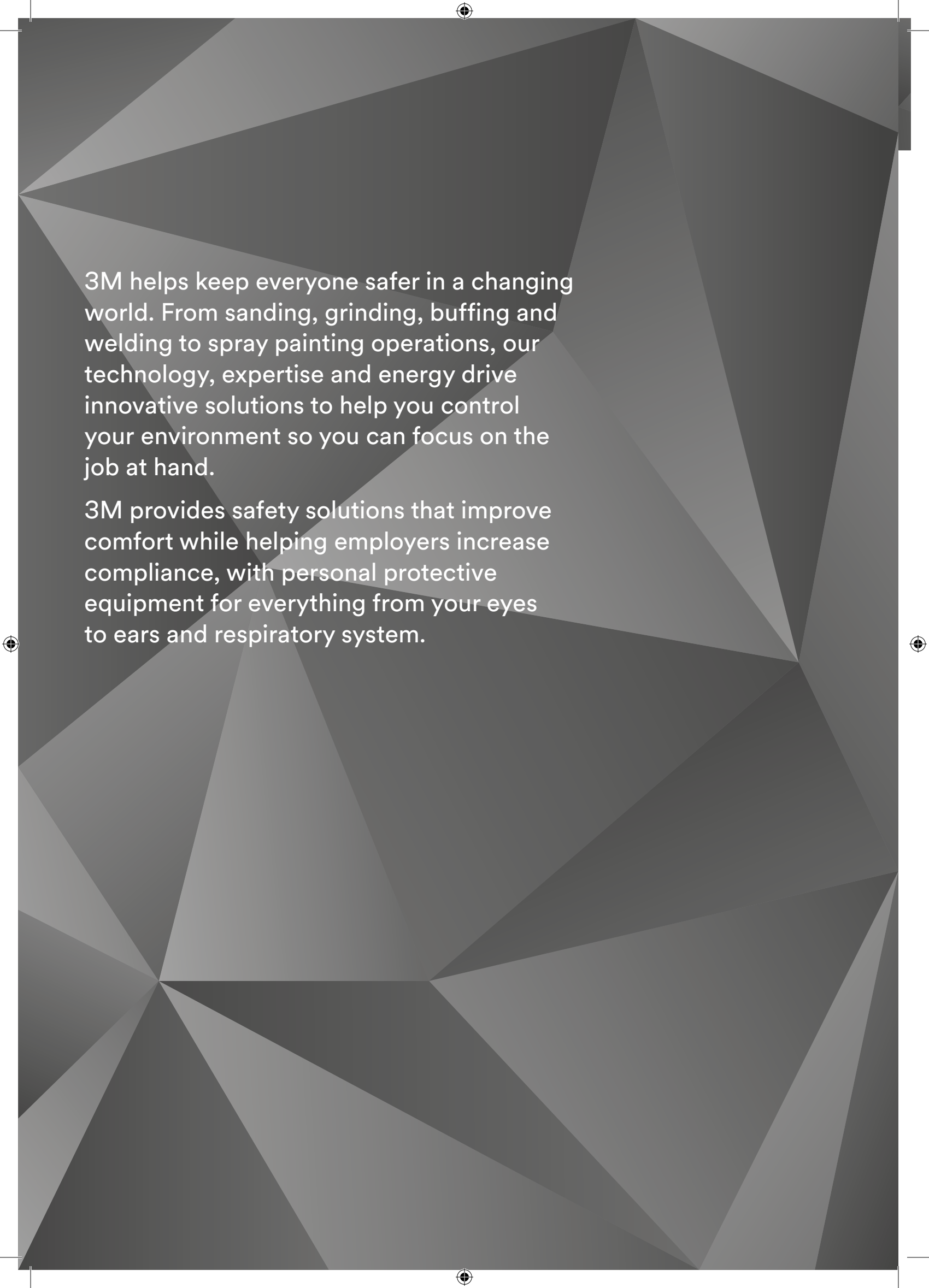


**3M** Science.  
Applied to Life.™

3M Automotive Aftermarket Division

# Safety Product Catalogue



3M helps keep everyone safer in a changing world. From sanding, grinding, buffing and welding to spray painting operations, our technology, expertise and energy drive innovative solutions to help you control your environment so you can focus on the job at hand.

3M provides safety solutions that improve comfort while helping employers increase compliance, with personal protective equipment for everything from your eyes to ears and respiratory system.

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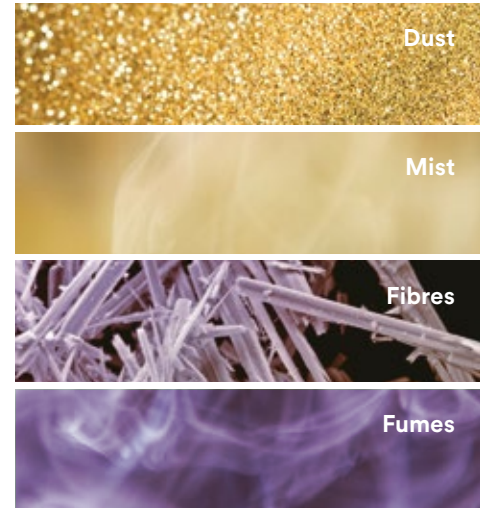


## Why Consider Health and Safety?

### Take your health and safety seriously – know the risks

Working in a bodyshop environment can expose you and your team to a range of hazards including:

- ▶ Airborne hazards such as fibres, particles from sanding, grinding or polishing; gases, vapours and mists from paints, solvents, adhesives and welding fumes. Even brief, unprotected exposure to some paint mists and vapours, or welding fumes, can cause irritation, illness or lead to serious health problems
- ▶ Loud noise from machine tools can cause temporary hearing loss and even permanent hearing loss. Noise-induced hearing loss isn't obvious – it's gradual damage that adds up over time. It's easy to think that you don't need to use hearing protection – until it's too late
- ▶ Dust and flying particles, chemical splashes and vapours can cause eye injuries and skin irritation
- ▶ Optical radiation from tasks such as welding or UV curing can lead to serious eye injuries



### Sanding, grinding and paint rectification

Sanding, grinding and machine compounding activities generate airborne particles such as filler dust. When inhaled, larger particles can cause irritation of the nose, throat and upper airways. Fine particles can penetrate into the lung and can cause tissue damage leading to short and long-term respiratory health effects/diseases. Filtering respirators are widely worn in bodyshops to help reduce exposure to particles. They work by trapping particles as the ambient air passes through them as the wearer breathes. Filtering respirators must seal adequately to the wearer's face, therefore wearers must be clean shaven and have passed a fit test.



### Applying coatings, adhesives and sealers

Coatings, adhesives and sealers produce airborne hazards whether they are sprayed or brush/cloth applied. When they are sprayed, a fine mist is generated together with solvent vapour. When they are brush/cloth applied solvent vapour will become airborne. Solvent vapours, once inhaled can be absorbed into the blood and if in sufficient quantity, can cause damage to the liver, kidneys and brain. Filtering respirators offering protection against particles and vapours are typically used in these applications. Goggles should be used to protect the eyes.



## Welding

Welding produces many hazards – electrical hazards, light hazards, metal fume, thermal hazards and gases including Ozone. Metal fume consists of very fine particles which may damage the lungs and cause short term adverse health effects such as metal fume fever and other longer-term respiratory illnesses. Ozone can also result in irritation and damage of the upper respiratory tract and longer-term lung damage. Welding shields must be used to provide eye and face protection. Respiratory protection worn under the welding shield will reduce exposure to metal fume, however for welding applications a respirator that additionally provides Ozone protection is required.



## Legislation

Health and Safety legislation places a general duty on employers so far as is reasonably practicable, to ensure the health, safety and welfare at work of their employees and others who maybe affected by their work activities.

There are various regulations in place to enforce H&S legislation. For example employers are required to:

- ▶ Conduct a risk assessment
- ▶ Implement a hierarchy of controls to eliminate, prevent or reduce exposure to hazardous physical conditions and substances
- ▶ PPE may be used where other control measures are not practical or feasible to control risks to workers health and safety. Tight-fitting respirators must be fit tested in accordance with national regulations (if applicable)

## Employee Duties

Legislation requires that employees (and the self-employed) are required to take reasonable care of their own safety and that of other people who may be affected by their actions. They are also required to co-operate with their employer to enable legal obligations to be met.

## Selecting the Correct Personal Protective Equipment (PPE)

Selecting the right PPE is critical. Inadequate protection can create serious health issues over time. 3M provides safety solutions you need to work safely, comfortably and effectively, with PPE for everything from your eyes to your ears and respiratory system:

- ▶ Disposable flat fold and cup shaped respirators
- ▶ Reusable half and full face respirators
- ▶ Powered and supplied air systems
- ▶ Eye and face protection
- ▶ Disposable and reusable ear plugs, ear muffs
- ▶ Communication solutions
- ▶ Welding protection
- ▶ Disposable and reusable protective coveralls



## The 4-Step Method

Selecting and specifying the appropriate Personal Protective Equipment (PPE) 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 protection:

### 1. Identify the hazards

- ▶ Dust, metal fume, gas, vapour, loud noise, flying particles, optical radiation, etc.



### 2. Assess the risk

- ▶ Assess the hazard levels against safety standards and consider all aspects of protection, e.g. respiratory, skin, eye, face, head and body.



1. The 3M™ Sound Detector SD-200 is a compact, lightweight sound level meter, designed to accurately measure workplace noise levels.
2. The 3M™ Noise Indicator™ NI-100 alerts users to potentially harmful noise levels, helping to identify areas where hearing protection may be required.
3. 3M™ Organic Vapour Monitor Badges measure personal exposure to hazards.

### 3. Select the right PPE

- ▶ Respiratory protection, eye and face protection, hearing protection & body protection.



### 4. Train in fitting and use

Make sure you know how to use and maintain your PPE 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](http://www.3M.eu/PPESafety)













# Respiratory Protection

# 3M Product Selection Guide

## 3M Product Selection Guide

This guide is only an outline. It is designed to help focus on the most appropriate products in the 3M range for various applications and hazards. It should not be used as the only means of selecting a product. It is ultimately the responsibility of the employer to select the most appropriate PPE and level of protection required based on a full risk assessment. Details regarding performance and limitations are set out on the product packaging and data sheets.

Products to consider			Disposable Particulate Respirators				Reusable Respirators	
			3M™ Aura™ Particulate Flat Fold Respirators 06910+, 06923+ & 06933+	3M™ Particulate Cup Shaped Respirators 06936+ / 06922 / 06983 / 06988	3M™ Welding Fume Respirator 06920	3M™ Speciality Particulate Respirator 06998	3M™ Maintenance Free Reusable Respirators 06941 / 06942	3M™ Reusable Half Masks 06962 / 06963 / 7502 / 7503
Application*	Typical hazards	Typical protection types required*						
Bonding	Solvent containing Adhesives	Organic vapour					✓ & safety eyewear	✓ with 06911 / 06915 filters & safety eyewear
Adhesives, Coatings and Sealers	Polyurethane Coating	Gas & vapour						✓ with 6059 filters & safety eyewear
	Organic Solvent/ with boiling point less than 65°C	Low boiling point organic vapour combination						✗
	Ammonia Based Paint Remover	Gas & vapour						✓ with 6059 filters & safety eyewear
Degreasing	Solvent vapours	Gas & vapour						✓ with 6059 filters & safety eyewear
Grinding	Dusts and other fine particles	Particulate	✓ & safety eyewear	✓ & safety eyewear	✓ & safety eyewear	✓ & safety eyewear	✓ & safety eyewear	✓ & safety eyewear & 6035 / 06925 / 5935 filter
Hand Sanding	Dusts and other fine particles	Particulate	✓ & safety eyewear	✓ & safety eyewear	✓ & safety eyewear	✓ & safety eyewear	✓ & safety eyewear	✓ & safety eyewear & 6035 / 06925 / 5935 filters
Machine Sanding	Dusts and other fine particles	Particulate	✓ & safety eyewear	✓ & safety eyewear	✓ & safety eyewear	✓ & safety eyewear	✓ & safety eyewear	✓ & safety eyewear & 6035 / 06925 / 5935 filters
Mixing Paint (where there is sufficient ventilation)**	Solvent-Based Paint	Organic vapour particulate combination					✓ & safety eyewear	✓ & safety eyewear & 06911 or 06915 + 06925 / 5935 filters + 501
Painting & Spraying**	Solvent-Based Paint	Organic vapour particulate combination					✓ & safety eyewear	✓ & safety eyewear & 06911 or 06915 + 06925 / 5935 filters + 501
	Water Soluble Paint	Organic vapour particulate combination					✓ & safety eyewear	✓ & safety eyewear & 06911 or 06915 + 06925 / 5935 filters + 501
	Solvents, Resins, Synthetic Resins	Organic vapour particulate combination					✓ & safety eyewear	✓ & safety eyewear & 06911 or 06915 + 06925 / 5935 filters + 501
	Latex-Paint, Residual Solvents	Organic vapour particulate combination					✓ & safety eyewear	✓ & safety eyewear & 06911 or 06915 + 06925 / 5935 filters + 501
	Isocyanates found in two-pack paints**	Organic vapour particulate combination						
Polishing & Compounding	Dusts and other fine particles	Particulate	✓ & safety eyewear	✓ & safety eyewear	✓ & safety eyewear	✓ & safety eyewear	✓ & safety eyewear	✓ & safety eyewear & 6035 / 06925 / 5925 / 5935 filters
Welding	Welding fumes/ Ozone gas	Particulate/ welding fume/ ozone UV/IR light			✓ with welding helmet		✓ with welding helmet	



**Key**

- ✓ May be suitable for use
- Not suitable for use
- \* Specific hazards and protection required need to be assessed by the user
- \*\* Follow local legislation on Isocyanate use

Powered and Supplied Air				Welding Protection		
3M™ Reusable Full Face Masks 6800/6900	3M™ Supplied Air System 06972	3M™ Versaflo™ Supplied Air System	3M™ Jupiter™ Powered Air Turbo	3M™ Speedglas™ Welding Helmet 10V	3M™ Speedglas™ Welding Helmet 100 Series	3M™ Speedglas™ Welding Helmet 9100V
with 06911 / 06915 filters	plus safety eyewear depending on reusable respirator used	✓	with 453-00-25P filters			
with 6059 filters	plus safety eyewear depending on reusable respirator used	✓	with 453-09-25P filters			
with 6098 filters	plus safety eyewear depending on reusable respirator used	✓				
with 6059 filters	plus safety eyewear depending on reusable respirator used	✓	with 453-09-25P filters			
with 6059 filters	plus safety eyewear depending on reusable respirator used	✓	with 453-09-25P filters			
6035 / 06925 / 5925 / 5935 filters	& safety eyewear depending on reusable respirator used	✓	with M-106 and the 450-00-25P Filter			
6035 / 06925 / 5925 / 5935 filters	& safety eyewear depending on reusable respirator used	✓	with 450-00-25P Filter			
6035 / 06925 / 5925 / 5935 filters	& safety eyewear depending on reusable respirator used	✓	with M-106 and the 450-00-25P Filter			
06911 or 06915 + 06925 / 5935 filters + 501	& safety eyewear depending on reusable respirator used	✓	with the 453-00-25P Filter			
06911 or 06915 + 06925 / 5935 filters + 501	& safety eyewear depending on reusable respirator used	✓	with the 453-00-25P Filter			
06911 or 06915 + 06925 / 5935 filters + 501	& safety eyewear depending on reusable respirator used	✓	with the 453-00-25P Filter			
06911 or 06915 + 06925 / 5935 filters + 501	& safety eyewear depending on reusable respirator used	✓	with the 453-00-25P Filter			
06911 or 06915 + 06925 / 5935 filters + 501	& safety eyewear depending on reusable respirator used	✓	with the 453-00-25P Filter			
	✓	✓				
6035 / 06925 / 5925 / 5935 filters	& safety eyewear depending on reusable respirator used	✓	with the 450-00-25P Filter			
				with respiratory protection	with respiratory protection	with respiratory protection

## The Importance of Fit

Particulate respirators and reusable half face masks 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:

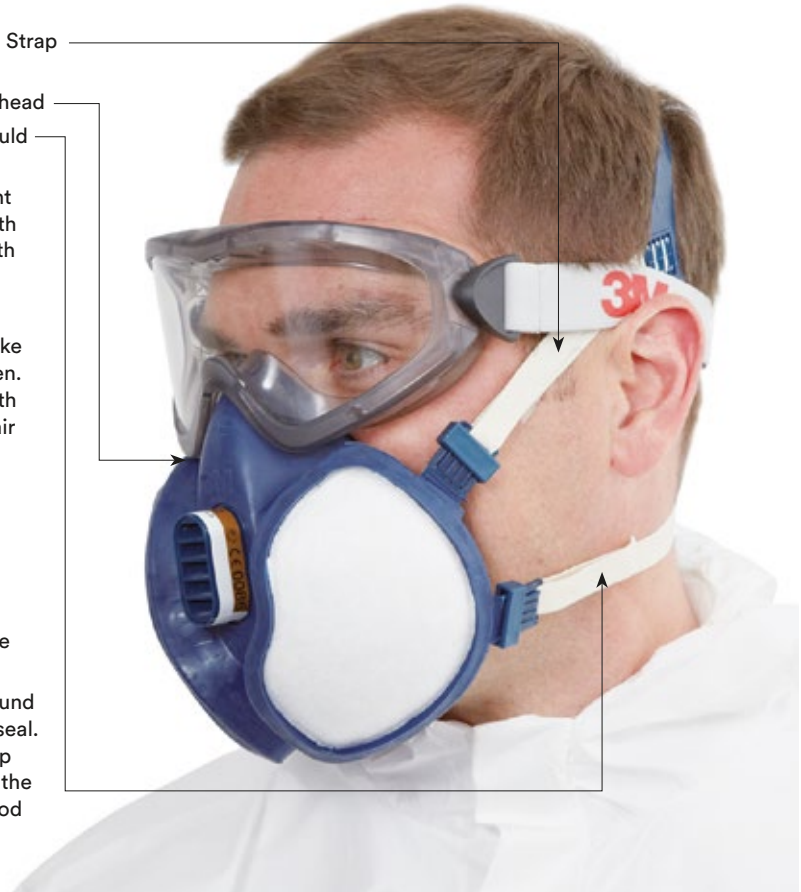
- ▶ Upper strap should be positioned on the crown of the head. Strap should not be twisted
- ▶ Respirator should be correctly positioned on your face and head
- ▶ Lower strap should be positioned below the ears. Strap should not be twisted
- ▶ Care must always be taken to ensure other safety equipment is compatible with your respirator and does not interfere with its fit, for example, straps should always be fitted underneath safety eyewear and hoods



- ▶ Before fitting your respirator, make sure that your face is clean shaven. Respirators must not be worn with stubble, beards or other facial hair under the area of the face seal as these can prevent a good seal to the face



- ▶ For flat fold respirators make sure the panels are fully unfolded
- ▶ Noseclip should be moulded around nose and cheeks to give a good seal. 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.
- ▶ Ensure that you read the product user instructions for full details

#### For Disposable Respirators:

Cover the front of the respirator with both hands. For an unvalved respirator **exhale** sharply, for a valved respirator **inhale** sharply

#### For Reusable Respirators:

Place the palm of your hand over the exhalation valve and **exhale** gently or cover the filters and **inhale** gently

- ▶ If air leaks at the respirator edges, re-adjust the fit to eliminate leakage and repeat the above fit check
- ▶ If air leaks around the nose, re-adjust the noseclip to eliminate the leakage
- ▶ If you cannot achieve a proper fit do not enter the hazardous area – see your supervisor



## The Importance of Fit

### Fit testing

Fit testing checks that a respirator provides an adequate seal to the wearer's face and is an industry wide requirement in some countries. Fit testing should be carried out on all wearers of respirators with tight fitting facepieces where testing has not been carried out before. Testing should be repeated at appropriate times, such as annually, or if the wearer's face shape changes due to weight loss or gain, or facial surgery.

### Fit test methods – quantitative and qualitative

Two main methods of fit testing are available, qualitative and quantitative fit testing.

Quantitative fit testing checks that the wearer can achieve an adequate seal between a tight-fitting facepiece and their face. It counts the number of particles both inside the mask and outside in the ambient air. From this, a fit factor – a measure of how well a respirator fits – is calculated. Fit testing equipment such as the TSI® PortaCount® Fit Tester are suitable for testing all types of tight-fitting respirator, disposable respirators as well as half-mask and full-face masks used with particulate or combination filters.

Qualitative fit testing provides a pass or fail result based on the wearer detecting a test agent. It provides a subjective measure of the quality of the seal of the facepiece to the wearers face. These tests are suitable for disposable respirators and half masks. The test agent can either be detected by taste or by smell. A controlled concentration of aerosol is introduced into a hood fitted over the wearer. This test is suitable for all disposable respirators and half masks fitted with particulate or combination gas/vapour and particulate filters. 3M offer two test kits in this category, one using a sweet tasting substance (saccharin) and the other which uses a bitter tasting solution (Bitrex®).

For further information on fit testing procedures, contact your safety officer or 3M.

### 3M products that can be used with the 3M FT-10/FT-30 kits are:

- ▶ All 3M Disposable Respirators
- ▶ 06941 & 06942 Reusable Respirators
- ▶ 06962 & 06963 Reusable Half Masks
- ▶ 7502 & 7503 Reusable Half Masks

3M offer two fit test kits FT-10 (Sweet) and FT-30 (Bitter). Each kit contains a hood and collar assembly, two nebulisers, sensitivity solution, test solution and detailed user instructions.

**Note:** The 3M FT-10/FT-30 kits can not be used with Full Face Masks – quantitative fit testing methods must be used. See local regulations on fit testing or contact 3M.

3M™ Qualitative Fit Test Kits FT10 (Sweet) & FT30 (Bitter)







# Disposable Particulate Respirators



## 3M™ Aura™ Particulate Flat Fold Respirators 06910+, 06923+ & 06933+

The 3M™ Aura™ Particulate Flat Fold Respirators are the result of 3M's continuous drive to improve comfort.

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.

### Typical Applications

- ▶ Construction
- ▶ Dry sanding
- ▶ Hand sanding
- ▶ Machine sanding
- ▶ Grinding
- ▶ Sweeping
- ▶ Buffing
- ▶ Polishing
- ▶ Compounding

### 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

#### 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

#### Designed to be compatible with:

- ▶ Eyewear from 3M
- ▶ Hearing Protection from 3M



#### 3M™ Aura™ Particulate Respirator 06933+

Classification: EN 149:2001+A1:2009  
FFP3 NR D  
Protection: Dust/Mist  
Nominal Protection Factor: 50

FFP3



3M™ Low Breathing Resistance Filter Technology



Foldable Three-Panel Design



3M™ Cool Flow™ Valve

#### Individual packaging

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



#### 3M™ Aura™ Particulate Respirator 06910+

Classification: EN 149:2001+A1:2009  
FFP1 NR D  
Protection: Dust/Mist  
Nominal Protection Factor: 4

FFP1



#### 3M™ Aura™ Particulate Respirator 06923+

Classification: EN 149:2001+A1:2009  
FFP2 NR D  
Protection: Dust/Mist  
Nominal Protection Factor: 12

FFP2





## 3M™ Particulate Cup Shaped Respirator 06936+

The 3M™ Cup Shaped Respirator 06936+ has been engineered to help improve fit to wearer's individual face shape and size.

With its robust shell and cup design, this respirator meets the particular requirements of the clogging test for FFP (filtering face piece) respirators and is EN 149 'R' rated which means that it may be used for more than one shift.

### Typical Applications

- ▶ Construction
- ▶ Dry sanding
- ▶ Hand sanding
- ▶ Machine sanding
- ▶ Grinding
- ▶ Sweeping
- ▶ Buffing
- ▶ Polishing
- ▶ Compounding

### Features and benefits:

#### Proprietary soft inner face seal

- ▶ Flexible material helps form comfortably onto a wide range of face shapes and sizes
- ▶ Innovative contoured design engineered to help provide a more secure seal around the nose
- ▶ Comfortable feel on the skin
- ▶ Easy to clean for wearer hygiene using the 3M™ Face Seal Cleaning Wipe 105 (as per EN 149+A1)
- ▶ Designed to help reduce eyewear fogging

#### Innovative design

- ▶ Engineered to help improve fit to wearer's individual face shape and size
- ▶ EN 149 'R' Rated. Reusable – this mask can be used for more than one shift
- ▶ Collapse resistant: works well in hot humid environments
- ▶ Modern and stylish
- ▶ Easy to don and doff

#### 3M™ Advanced Electret Filter Media (AEM)

- ▶ High performance filter material that's easy to breathe through
- ▶ Meets the clogging test requirements of EN 149:2001+A1:2009
- ▶ Consistent high quality performance

#### 3M™ Cool Flow™ Valve

- ▶ Effective exit of heat build up provides a cooler and more comfortable wear and helps to minimise the risk of fogging eyewear

#### Adjustable braided headbands

- ▶ 4-point adjustment helps to provide a more secure feel
- ▶ Comfortable on the head and neck

#### Materials

- ▶ This product does not contain components made from:
  - ▶ natural rubber latex
  - ▶ metal
  - ▶ PVC

#### Designed to be compatible with:

- ▶ Safety Eyewear from 3M
- ▶ Hearing protection from 3M







#### 3M™ Particulate Respirator 06936+

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

**Protection:** Dust/Mist/Metal Fume  
**Nominal Protection Factor:** 50

FFP3

-  3M™ High Performance Filter Material
-  Face Seal
-  3M™ Cool Flow™ Valve
-  Adjustment Buckle Straps





## 3M™ Particulate Cup Shaped Respirators 06922, 06983 & 06988

The 3M™ Cup Shaped Respirators 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 06922 respirator offers durable, comfortable protection particularly in hot and humid conditions.

### Typical Applications

- ▶ Hand sanding
- ▶ Machine sanding
- ▶ Grinding

### 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

#### Designed to be compatible with:

- ▶ Eyewear from 3M
- ▶ Hearing protection from 3M



#### 3M™ Particulate Respirator 06922

**Classification:** EN 149:2001+A1:2009

FFP2 NR D

**Protection:** Dust/Mist

**Nominal Protection Factor:** 12

FFP2

#### Unvalved

#### 3M™ Particulate Respirator 06983

**Classification:** EN 149:2001+A1:2009

FFP1 NR D

**Protection:** Dust/Mist

**Nominal Protection Factor:** 4

FFP1



#### 3M™ Particulate Respirator 06988

**Classification:** EN 149:2001+A1:2009

FFP2 NR D

**Protection:** Dust/Mist

**Nominal Protection Factor:** 12

FFP2



3M™ High Performance Filter Material



3M™ Cool Flow™ Valve



## 3M™ Welding Fume Respirator 06920

The 3M™ Welding Fume Respirator 06920 provides 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 06920 has been designed specifically for welding applications to provide protection against ozone and welding fumes, plus relief from nuisance odours.

### Typical Applications

- ▶ MIG welding
- ▶ TIG welding
- ▶ ARC welding
- ▶ Soldering

### 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

#### 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

#### Adjustable braided headbands

- ▶ Help provide comfort to face, head and neck

#### Designed to be compatible with:

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



### 3M™ Welding Particulate Respirator 06920

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

**Protection:** Dust/Mist/Ozone/Nuisance level odours  
**Nominal Protection Factor:** 10 for Ozone and Particulates

FFP2



**3M™ High Performance Filter Material**



**3M™ Cool Flow™ Valve**



**Adjustment Buckle Straps**



**Activated Carbon**



## 3M™ Speciality Particulate Respirator 06998

The 06998 has been developed to provide lightweight, effective, comfortable and hygienic respiratory protection for a range of working environments.

The 06998 protects against dust and mist and also features an integrated activated carbon layer, offering relief from nuisance organic vapour odours below nominal protection factor.

### Typical Applications

- ▶ Hand sanding
- ▶ Machine sanding
- ▶ Grinding
- ▶ Polishing
- ▶ Compounding

### 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

#### Carbon layer

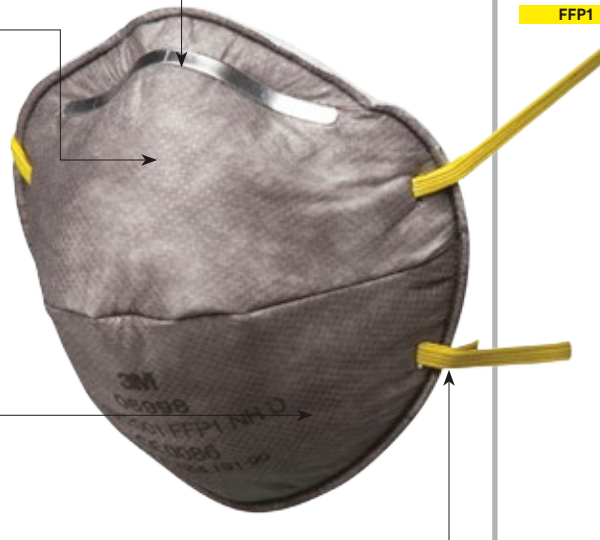
- ▶ Provides relief from nuisance level organic vapours below nominal protection factor

#### Colour coded straps

- ▶ Easy to recognise performance level by colour coded straps

#### Designed to be compatible with:

- ▶ Eyewear from 3M
- ▶ Hearing Protection from 3M



### 3M™ Speciality Particulate Respirator 06998

#### Classification:

EN 149:2001+A1:2009 FFP1 NR D

Protection: Dust/Mist/Nuisance Level Organic Vapour

Nominal Protection Factor: 4 for Particulates

FFP1



3M™ High Performance Filter Material



Activated Carbon





# Reusable Respirators



## 3M™ Maintenance Free Reusable Respirators 06941 & 06942

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.

### Typical Applications

- ▶ Painting
- ▶ Spraying
- ▶ Varnishing
- ▶ Degreasing
- ▶ Mixing paint

### 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

#### 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

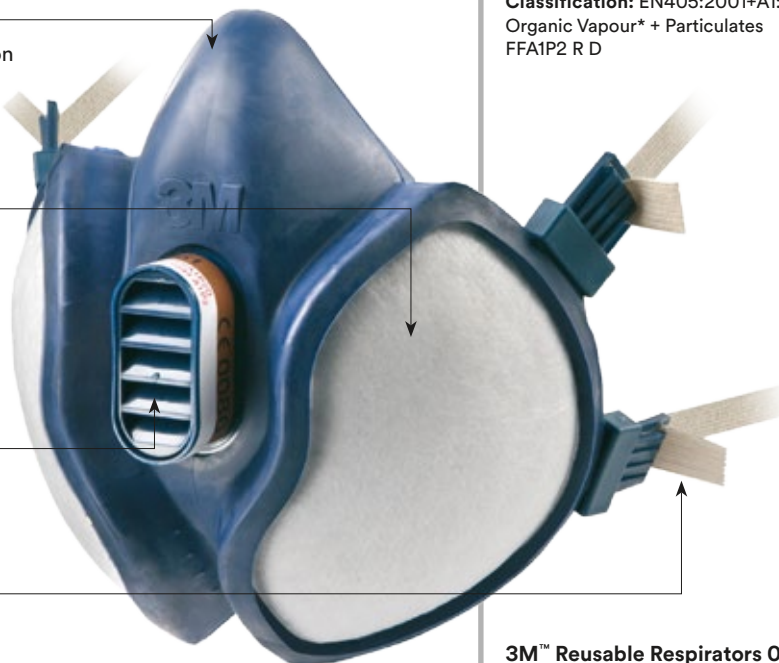
- ▶ Helps to achieve a stable secure feel
- ▶ Easy to fasten neck strap

#### Cost effective

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

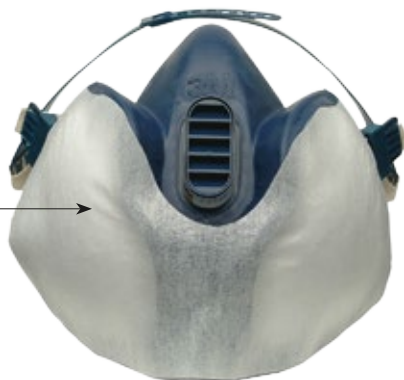
#### Overspray guard

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



#### 3M™ Maintenance Free Respirator 06941

**Classification:** EN405:2001+A1:2009  
Organic Vapour\* + Particulates  
FFA1P2 R D

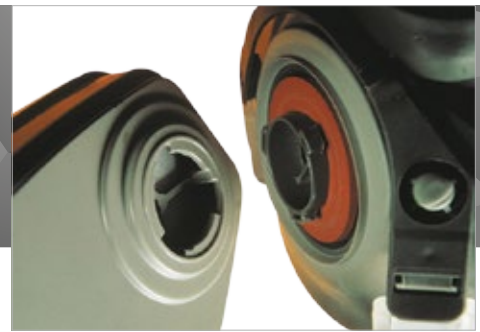


#### 3M™ Reusable Respirators 06942

Organic Vapour\* + Particulates  
FFA2P3 R D

#### Compatible with:





- ▶ Eyewear from 3M
- ▶ Hearing Protection from 3M





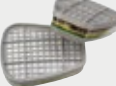
## 3M™ Filters for use with Reusable Respirators

3M has developed a 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

Filter	Protection level	Protection against	
06925	P2 R	solid and liquid particles	
5935†	P3 R	solid and liquid particles	
6035	P3 R	solid and liquid particles – in solid plastic case for rough application	
501		filter retainer	

### 3M™ Gas and Vapour Filters

Filter	Protection level	Protection against	
06911	A1	organic gases & vapours boiling point (bp)>65°C	
06915	A2	organic vapours bp>65°C	
6059	ABEK1	organic vapours (bp>65°C), inorganic vapours, acid gases ammonia and its derivatives	

### 3M™ Gas, Vapour and Particulate Filters

Filter	Protection level	Protection against	
6098*	AXP3 NR	single compound organic vapours (bp<65 °C) and particulates	

\* Only for full face masks

### Accessories for 3M Half Masks



3M™ Face Seal Wipe 105

### 3M™ Organic Vapour Badges

3M™ organic vapour badges are simple and effective devices that collect certain gas/vapour airborne contaminants using the principle of diffusion. They assist in the assessment of workplace contaminant measurement, both personal and background.



The filters shown above conform with the European Standards: EN14387 and/or EN143.

† 06925 and 5935 filters can be used with 06941, 06942 & 6059 gas and vapour filters for combined gas and particulate protection in conjunction with a 501 filter retainer.





## 3M™ Reusable Half Face Masks 06962 & 06963

The 3M™ Reusable Half Masks 06962 and 06923 are economical, low-maintenance, simple to handle and lightweight. Available in two sizes, 06962 (medium) and 06963 (large), 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. These half masks can also be used with 3M™ Supplied Air Systems for your increased convenience and flexibility.

### Typical Applications

- ▶ Painting
- ▶ Spraying
- ▶ Coating
- ▶ Welding

### 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

- ▶ Colour coded sizes for easier identification
- ▶ Lightweight elastomeric material for comfort during long periods of work
- ▶ Low weight of 82g

#### 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

#### Compatible with:



3M™ 06972 Supplied Air System



#### 3M™ Half Mask 06962 (Medium)

Classification: EN140:1998

- 3M™ Half Mask 06962 – medium (grey)
- 3M™ Half Mask 06963 – large (dark grey)

#### Starter Kits Available

- 3M™ 06967 A1P2 R Respirator Starter Kit – medium
- 3M™ 06968 A1P2 R Respirator Starter Kit – large
- 3M™ 06980 A2P3 R Respirator Starter Kit – medium
- 3M™ 06981 A2P3 R Respirator Starter Kit – large



For filter selection, please see page 20



## 3M™ Reusable Half Face Masks 7502 & 7503

The 7502 & 7503 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 two sizes, 7502 (medium) and 7503 (large), 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.

### Typical Applications

- ▶ Painting
- ▶ Spraying
- ▶ Coating
- ▶ Welding

### 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

#### 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

#### Compatible with:



3M™ 06972  
Supplied Air System

#### 3M™ Half Mask 7503 (Large)

Classification: EN140:1998

3M™ Half Mask 7502 – medium (light blue)  
3M™ Half Mask 7503 – large (dark blue)

#### Starter Kits Available

3M™ 06772 A1P2 R Respirator Starter Kit – medium  
3M™ 06773 A1P2 R Respirator Starter Kit – large  
3M™ 06782 A2P2 R Respirator Starter Kit – medium  
3M™ 06783 A2P2 R Respirator Starter Kit – large



For filter selection, please see page 20



## 3M™ Reusable Full Face Masks 6800 & 6900

The 3M™ Full Face Masks 6800 and 6900 are simple to handle and comfortable to wear. The exhalation port provides increased durability and is easy to keep clean.

Available in two sizes, 6800 (medium) and 6900 (large), both 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

### Typical Applications

- ▶ Painting
- ▶ Spraying
- ▶ Coating
- ▶ Welding

### 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



#### Compatible with:



3M™ 06972 Supplied Air System

### 3M™ Full Face Mask 6800 (Medium)

Classification: EN136:1998 (Class 1)

Available in two sizes:  
3M™ Full Face Mask 6800 – medium  
3M™ Full Face Mask 6900 – large

#### Accessories for 3M™ Full Face Masks

3M™ Face Seal Wipe 105



3M™ Full Face Carry/Storage Bag 107



For filter selection, please see page 20





# Powered & Supplied Air Respirators





## 3M™ Supplied Air System 06972

The 3M™ Supplied Air Respirator System 06972 is a comfortable and versatile supplied air respirator system for use with the 3M™ Half Masks (06962, 06963, 7502 & 7503) and 3M™ Full Face Masks (6800 & 6900). The 06972 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 06972 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

#### 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

#### 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



† If paint contains isocyanate compounds please follow local legislation on isocyanate use

### Typical Applications

- ▶ Spray painting†
- ▶ Glass fibre fabrication
- ▶ Powder coating
- ▶ Material handling

#### 3M™ 06972 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

#### 3M™ Spray Gun Adapter C-231

The 06972 includes a spray gun adapter.



#### 3M™ Flow Check Bag FCB-01

The 06972 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



#### Select your individual respirator system:

1. Choose the 06972 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)

The 06972 system is compatible with 3M™ Accuspray™ System (HG14) and 3M™ PPS (Paint Preparation System)



\* 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.



## 3M™ Versaflo™ Supplied Air Respirator Kit 69500

The 3M™ Versaflo™ Supplied Air Respirator Kit 69500 provides an easy and convenient solution for paint sprayers by bringing together the main components of a supplied air respirator system.

The system provides a combined respiratory protection against;

- ▶ Particles e.g. fine dusts, aerosols, paint spray and metal fume
- ▶ Gases and vapours

The regulator ensures an individually adjustable, consistently-controlled airflow, the breathing tube has a self-adjusting length for improved fit for all wearers and the faceshield is lightweight giving comfortable respiratory, eye and face protection. Peel-off visor covers protect the visor from scratches and overspray and the Auxiliary Air Hose provides a reliable connection for a spray gun.

There are additional components required to get started with this kit, however the customer has a choice of options, so these items are not supplied in the kit:

- ▶ Rectus 25 or Rectus 95 Coupling Plugs
- ▶ Compressed air supply tube

3M™ Aircare™ Filtration Units are also available for removing water and oil aerosols, particles and odours from the facility-supplied compressed air.

### Protection Class:

- ▶ CE Approved
- ▶ EN14594 Class 2A/2B (3M provide a range of headtops and compressed air supply tubes that meet both A and B classification)



### Typical Applications

- ▶ Spray painting\*
- ▶ Glass fibre fabrication
- ▶ Powder coating
- ▶ Material handling

### 3M™ Versaflo™ Supplied Air Respirator Kit 69500 includes:

1 x	3M™ Versaflo™ V-500E Regulator
1 x	3M™ Versaflo™ M-106 Faceshield
1 x	3M™ Versaflo™ BT-30 Breathing Tube
1 x	3M™ C-231 Auxiliary Air Hose
40 x	3M™ M-928 Versaflo™ Peel-Off Visor Covers
1 x	3M™ M-976 Versaflo™ Head and Neck Shoulder Cover
10 x	3M™ BT-922 Breathing tube covers

The system is compatible with 3M™ Accuspray™ System (HG14) and 3M™ PPS (Paint Preparation System)



\* If paint contains isocyanate compounds please follow local legislation on isocyanate use



## 3M™ Jupiter™ Powered Air Turbo

The 3M™ Jupiter Respirator provides respiratory protection against particulate and gaseous contaminants. 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 units 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.

### Typical Applications

- ▶ Sanding
- ▶ Grinding
- ▶ Metal working
- ▶ Surface coatings
- ▶ Finishing

### 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

#### Intrinsic safety (IS)

- ▶ Only when used with intrinsically safe kit
- ▶ Kit contains pouch and intrinsically safe battery
- ▶ 3M part number 085-12-OOP

#### Respiratory safety

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



### 3M™ Jupiter™ Powered Air Starter Kit includes:

Jupiter Turbo	085-00-10P
Decontamination Belt + Clip	BLT-12 + BLT-15
Airflow Indicator Tube and Calibration Tube	021-14-12P
A2P Filters (Pair)	453-00-25P2X6
Pre-Filters (Pair)	461-00-02P24X5
Self-adjusting Breathing Tube	BT-30
8 hour Battery (NiMH)	007-00-64P
Battery Charger	CHG-02E



### Other options:

P Filters (Pair)	450-00-25P2X12
A2BEK1P Filters (Pair)	453-09-25P2X6
Battery Pack – 4 hour	007-00-63P
10 Station Intelligent Charger	003-00-59P

### Now choose your headtop:



#### 3M™ Versaflo™ Faceshield M-106

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

**Fabric material:** Polyurethane coated polyamide

**Classification:** EN 12941 TH2

**NPF\*:** 50



#### 3M™ Versaflo™ Helmet M-306

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

**Fabric material:** Polyurethane coated polyamide

**Classification:** EN 12941 TH2

**NPF\*:** 50



#### 3M™ Versaflo™ Headcover S-133

General purpose, cost effective fabric  
**Fabric material:** 2-layer polypropylene spunbond/laminated film

**Visor material:** PETG

**Classification:** EN 12941 TH3

**NPF\*:** 500

\* 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.





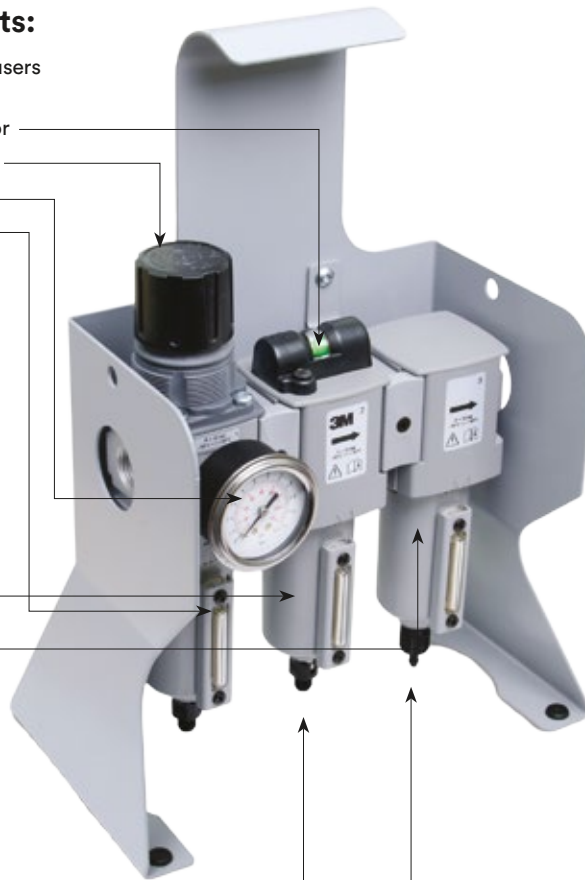
## 3M™ Aircare™ Filtration Units

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.







# Hearing Protection

## Why Protect your Hearing?

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

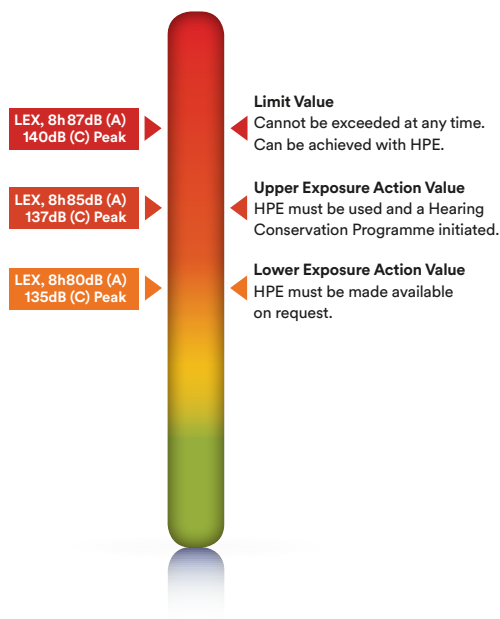
Bodyshops can be noisy places and exposure to hazardous noise can permanently damage your hearing. Noise-induced hearing loss (NHL) isn't obvious – it's usually gradual damage that adds up over time, and it's easy to ignore using protection until it's too late.

### The facts

**The #1 Reported Occupational Health Issue:** data from the European Agency for Safety and Health at Work shows that NHL 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.

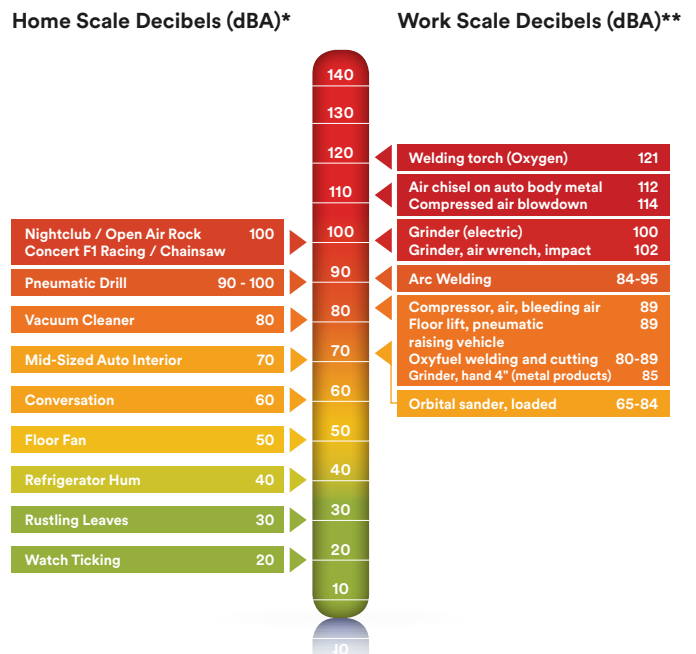
### The regulations



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



### Hearing Protection Concerns

**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.

\* Source: European Agency for Safety and Health at Work

\*\* 3M Navigator™ Sound Level Database, [www.3M.com/Hearing](http://www.3M.com/Hearing)



## 3M™ Noise Indicator™ NI-100

### Accurate Noise Detection

The 3M™ Noise Indicator NI-100 alerts users to potentially harmful 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 including bodyshops. 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"

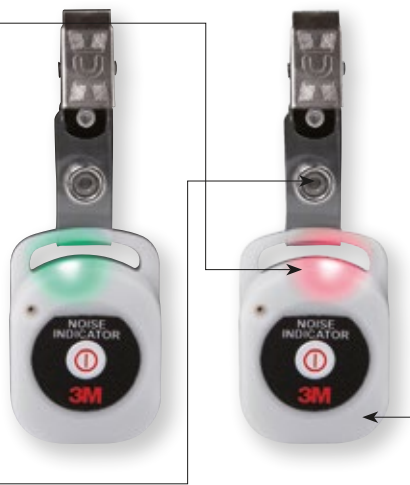
- ▶ Green LED ("go") flashes when noise level is below 85dB(A)
- ▶ Red LED ("No Go") flashes when noise level exceeds 85dB(A)
- ▶ Easy-to-understand visual indication when hearing protection may/may not be needed

#### 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 LEDs 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™ Optime™ Alert System

Our system uses a simple, logical 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.

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



Please note: At levels above 95dB(A) you will need an accurate noise assessment to correctly select the product.

### 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.



3M™ E-A-R™ Classic™ Earplugs  
SNR: 28dB



3M™ E-A-R™ Express™ Earplugs  
SNR: 28dB



3M™ Earplugs 1261/1271  
SNR: 25dB



3M™ Earplugs 1310  
SNR: 26dB under-the-chin (U-T-C)



3M™ E-A-R EARcaps™ Earplugs  
SNR: 23dB under-the-chin (U-T-C)



3M™ PELTOR™ X1 Earmuffs  
SNR: 27dB



3M™ PELTOR™ Optime™ I Earmuffs  
SNR: 27dB

### 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.



3M™ E-A-R™ Ultrafit™ Earplugs  
SNR: 32dB



3M™ PELTOR™ Optime™ II Earmuffs  
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.



3M™ E-A-R™ EARsoft™ Yellow Neons™  
SNR: 36dB



3M™ E-A-R™ Classic™ Soft Earplugs  
SNR: 36dB



3M™ Disposable Earplugs 1100/1110  
SNR: 37dB



3M™ PELTOR™ Earmuffs X4  
SNR: 33dB





# Roll Down PU Foam Disposable 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

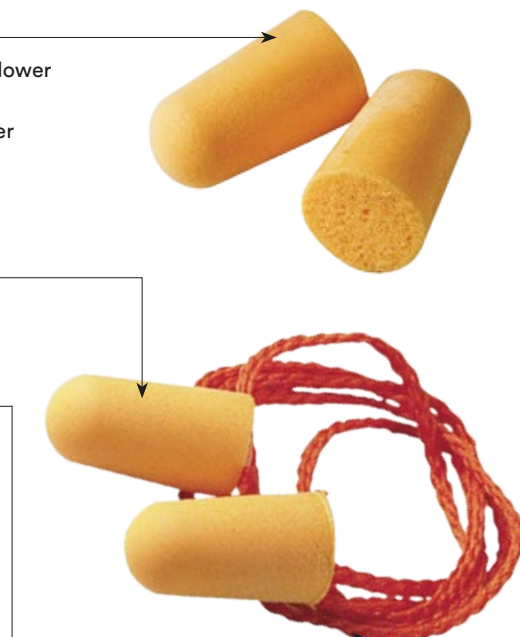
- ▶ Tapered design fits most ear canals making the plugs easier to use
- ▶ One size only
- ▶ Dispenser available (1100)
- ▶ Polyester cord (1110) helps prevent loss of earplugs

### 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 Value (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

### Attenuation

3M™ E-A-R™ EARsoft™ Yellow Neons™ Earplugs

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	23.7	30.8	36.1	39.2	39.5	35.8	42.1	46.1
Standard Deviation (dB)	6.7	6.5	6.7	4.7	3.9	4.9	3.1	3.3
Assumed Protection Value (dB)	17.00	24.3	29.4	34.5	35.6	30.9	39.0	39.0

SNR = 36dB. H = 34dB. M = 34dB. L = 31dB

### 3M™ Disposable Earplugs 1100/1110

Available corded, uncorded and with dispenser  
SNR: 37dB



### Other 3M™ Disposable Earplugs

#### 3M™ E-A-R™ EARsoft™

#### Yellow Neons™ Earplugs

The E-A-R™ standard PU earplugs. Available corded (Yellow Neons), uncorded and with dispenser  
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





## 3M™ E-A-R™ Classic™ Disposable Earplugs

More than 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

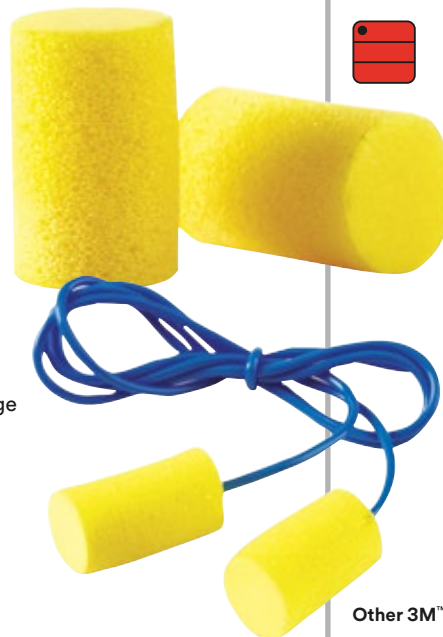
- ▶ Features a proprietary slow recovery vinyl foam, engineered to protect against noise and vibration
- ▶ Expands to the shape of the wearer's ear canal, thereby providing an effective acoustic seal
- ▶ The unique 3M™ E-A-RFit™ Validation System allows users to obtain their own personal attenuation 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

#### 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



#### 3M™ E-A-R™ Classic™ Earplugs

Available corded, uncorded and with dispenser  
SNR: 28dB



#### 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 Value (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

#### Attenuation

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

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	28.2	30.6	32.8	35.9	36.0	38.5	43.8	43.1
Standard Deviation (dB)	6.7	6.4	5.4	4.2	3.7	3.2	3.8	3.8
Assumed Protection Value (dB)	21.5	24.2	27.4	31.7	32.3	35.3	40.0	39.3

SNR = 36dB. H = 36dB. M = 33dB. L = 29dB

#### 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™ One-Touch™ Dispenser





## Push-to-Fit Earplugs

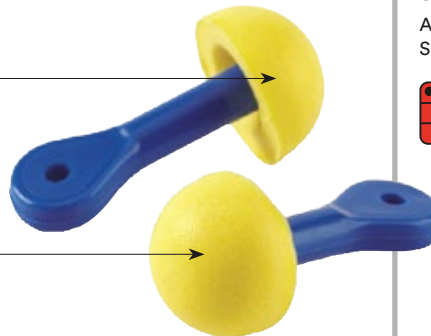
The 3M™ E-A-R™ Express™ Push-to-Fit earplugs are very easy to insert since there is no roll down needed: just use the soft flexible grip to push the earplug into position and achieve excellent protection. Because you don't have to touch the foam during fitting, it is one of the most hygienic types of 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-R foam tip shaped and sized to mold comfortably fitting virtually every size ear canal

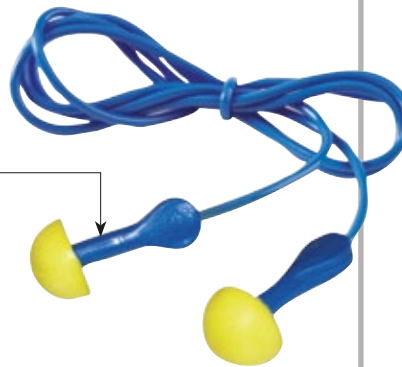


#### Convenient

- ▶ Available corded or uncorded
- ▶ No roll down required
- ▶ 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



#### 3M™ E-A-R™ Express™ Earplugs

Available corded, uncorded  
SNR 28dB



#### 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 Value (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





## Reusable Earplugs

Reusable 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 proprietary, pre-moulded, triple flanged earplugs. Available in two different styles.



### Features and benefits:

#### Comfortable

- ▶ Unique and proprietary 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 Value (dB)	23.2	22.0	22.7	26.9	27.3	32.8	38.3	38.4

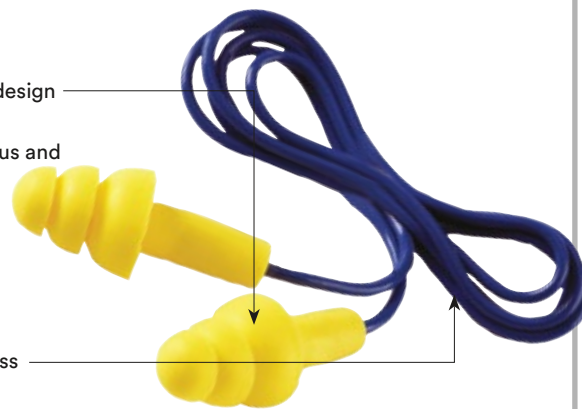
SNR = 32dB. H = 33dB. M = 28dB. L = 25dB

#### Attenuation

3M™ Earplugs 1261/1271

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	26.6	27.7	28.4	29.5	29.6	35.6	35.6	38.9
Standard Deviation (dB)	9.4	9.9	10.9	9.6	8.2	6.8	9.8	6.7
Assumed Protection Value (dB)	17.2	17.8	17.5	19.9	21.4	28.8	25.8	32.2

SNR = 25dB. H = 27dB. M = 22dB. L = 20dB



### 3M™ E-A-R™ Ultrafit™ Earplugs

SNR: 32dB



### 3M™ Earplugs 1261/1271

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





## 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)

### 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 or Behind-the-Head (B-T-H) modes
- ▶ Easy to use
- ▶ Ideal for people moving in and out of noisy work environments
- ▶ Replacement pods available

#### Compatible with

- ▶ Designed to be compatible with other 3M PPE



### 3M™ Earplugs 1310

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



Wear in Under-the-Chin (U-T-C) mode



or Behind-the-Head (B-T-H) modes

#### Attenuation

3M™ Earplugs 1310 (In U-T-C mode)

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	22.6	21.7	21.8	23.6	25.1	34.8	40.5	42.7
Standard Deviation (dB)	5.0	4.6	4.5	4.3	3.0	3.2	4.3	3.6
Assumed Protection Value (dB)	17.6	17.0	17.3	19.3	22.1	31.6	36.2	39.1

SNR = 26dB. H = 30dB. M = 22dB. L = 19dB

#### 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 Value (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)





## 3M™ PELTOR™ Optime™ Earmuffs I & II

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.

**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
- ▶ The specially designed sealing rings feature a soft cushion cover

#### 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™ II Earmuffs Headband

SNR: 31dB

#### Accessories

Hygiene kits are available for each earmuff version



#### Attenuation

3M™ PELTOR™ Optime™ II Earmuffs

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	14.6	20.2	32.5	39.3	36.4	34.4	40.2
Standard Deviation (dB)	1.6	2.5	2.3	2.1	2.4	4.0	2.3
Assumed Protection Value (dB)	13.0	17.7	30.2	37.2	34.0	30.4	37.9

SNR = 31dB. H = 34dB. M = 29dB. L = 20dB

#### Attenuation

3M™ PELTOR™ Optime™ I – Earmuffs

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	11.4	18.7	27.5	32.9	33.6	36.6	35.9
Standard Deviation (dB)	4.1	3.6	2.5	2.7	3.4	2.7	3.7
Assumed Protection Value (dB)	7.3	15.1	25.0	30.1	30.2	33.9	32.2

SNR = 27dB. H = 32dB. M = 25dB. L = 15dB

#### 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™ Earmuffs X1A & X4A

The 3M™ PELTOR™ Earmuffs X1A & X4A have been developed on the basis of design, comfort and attenuation techniques. This range sets a new standard for over-the-ear protection. Historically higher attenuating earmuffs meant larger and bulky cups, but no longer. The 3M™ PELTOR™ Earmuffs X4A can attenuate by as much as 33dB whilst maintaining a sleek, low profile aesthetically pleasing design.

**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

- ▶ 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)

#### 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

#### Attenuation

3M™ PELTOR™ X4A Earmuffs

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	19.6	17.8	22.1	30.6	39.5	37.3	43.8	42.1
Standard Deviation (dB)	4.1	2.3	2.5	1.8	2.9	4.1	2.8	4.0
Assumed Protection Value (dB)	15.5	15.5	19.6	28.8	36.6	33.2	41.1	38.2

SNR = 33dB. H = 36dB. M = 30dB. L = 22dB

#### Attenuation

3M™ PELTOR™ Earmuffs X1A

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	15.6	11.9	15.4	24.5	34.3	32.8	37.4	37.4
Standard Deviation (dB)	3.6	2.0	2.6	2.6	2.3	3.3	2.5	3.8
Assumed Protection Value (dB)	12.0	9.9	12.8	22.0	31.9	29.5	34.9	33.5

SNR = 27dB. H = 32dB. M = 24dB. L = 16dB



#### 3M™ PELTOR™ X4A Earmuffs

SNR: 33dB



#### 3M™ PELTOR™ Earmuffs X1A

SNR: 27dB

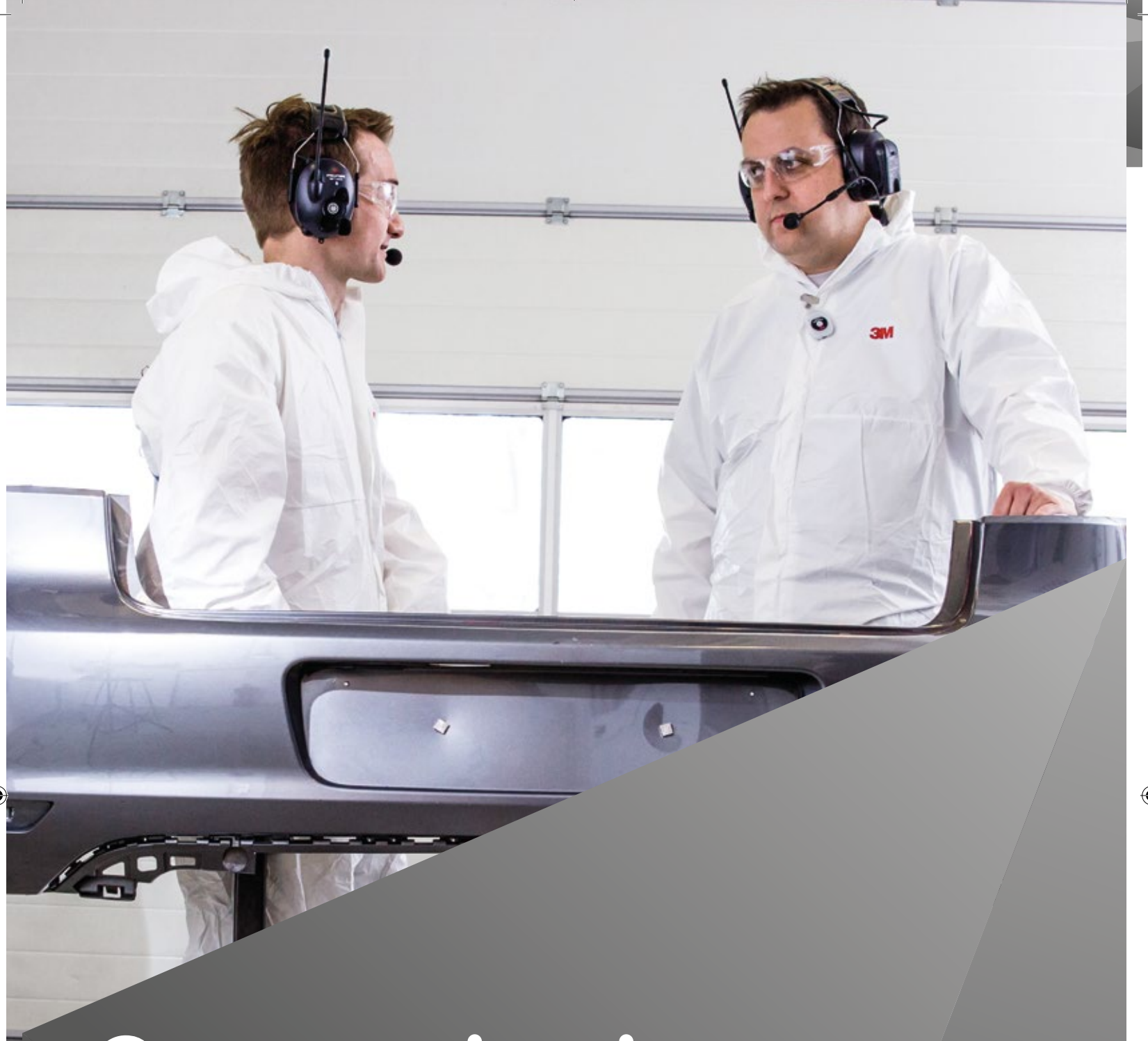
Available as headband or helmet mounted version.

Colour coded green, indicating first level of attenuation within this range



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





# 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 noisier environments make it possible for users of hearing protectors to communicate very effectively – with their immediate environment and with people further away.

### The importance of wearing hearing protection 100% of time exposed



**100% usage**  
Gives the expected protection



**99% usage**  
Just five minutes of carelessness per day significantly reduces the effect of the hearing protector



**90% usage**  
Virtually no protection

### Safety

To be effective, a hearing protector should be used 100% of the time in noisy environments. Even taking it off for a short time dramatically reduces its effectiveness and greatly increases the risk of hearing damage. The 3M™ PELTOR™ Communication Solutions encourage longer use because the wearer feels less isolated and can communicate with others more easily.

### Function symbols

To help you to understand the functionality of the products you will find below symbols on each product page.



Hearing protection with level-dependent function for ambient listening



Hearing protection that features Bluetooth® technology, for wireless connection to mobile phone, or communication radio



Hearing protection with built in two-way radio



Hearing protection with built-in FM radio receiver



Hearing protection with external audio input



Hearing protection for communication with external two-way radio

### Key function

		<b>FM-Radio</b>						
		<b>WS™ Alert™ XP</b>						
		<b>LiteCom Plus</b>						





## 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.

### 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



**PELTOR™**

### 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 Value (dB)	14.7	24.4	32.3	35.0	29.9	33.6	33.5

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



## 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** 430 g (headband)  
**(incl. batteries):** 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

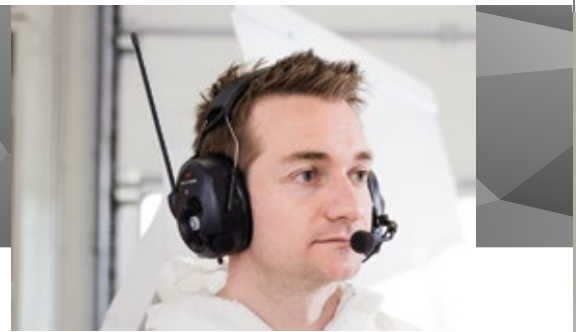
### Attenuation

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 Value (dB)	13.2	17.7	25.9	27.2	32.7	34.4	34.1

SNR = 29dB. H = 33dB. M = 26dB. L = 20dB



## 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 3km. 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 3km 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

### 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 Value (dB)	17.1	23.6	32.4	35.3	32.7	37.5	36.8

SNR = 34dB. H = 35dB. M = 32dB. L = 25dB

## 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** 464g (headband)  
**(incl. batteries):** 491g (helmet att.)  
453g (neckband)

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

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

### 3M™ PELTOR Accessories

HY79 Hygiene kit  
MT7N-02 Dynamic microphone (standard)  
ACK081 Battery  
AL2AI Charging cable  
FR08 Power supply  
FL5602 External PTT





# Eye & Face Protection

## Why Protect your Eyes?

Eye injuries and face injuries can occur in the bodyshop when you're not wearing any eye and face protection or when you're wearing the wrong protection for the job. The selection guide below outlines the different options available to help you select the right product.

### 3M Product Selection Guide

This guide is only an outline. It is designed to help focus on the most appropriate products in the 3M range for various applications and hazards. It should not be used as the only means of selecting a product. It is ultimately the responsibility of the employer to select the most appropriate PPE and level of protection required based on a full risk assessment. Details regarding performance and limitations are set out on the product packaging and data sheets.

Products to consider			Spectacles					Goggles					Face-shields	Welding Protection		
Application*	Typical hazards	Typical protection types required*	3M™ SecureFit™ Spectacles 200 Series	3M™ SecureFit™ Spectacles 400 Series	3M™ Comfort Line Spectacles 2840 Series	3M™ Solus™ 1000 Series	3M™ Overspectacles 2800 Series	3M™ Comfort Line Safety Goggles 2890 Series	3M™ Comfort Line Safety Goggles 2890S	3M™ Comfort Line Safety Goggles 2890SA	3M™ Comfort Line Safety Goggles 2890A	3M™ Comfort Line Safety Goggles 2895S	3M™ Headgear G500	3M™ Speedglas™ Welding Helmet 10V	3M™ Speedglas™ Welding Helmet 100 Series	3M™ Speedglas™ Welding Helmet 9100V
Bonding	Solvent containing adhesives	Chemical splashes and/or vapours						✓	when vapours are present	when vapours are present	✓	✓				
Adhesives, coatings & sealers	Poly-urethane coating	Chemical splashes and/or vapours						✓	when vapours are present	when vapours are present	✓	✓				
Degreasing	Solvent vapours	Chemical vapours							✓	✓						
Grinding	Dusts and other fine particles	Dust and flying particles						✓	✓			✓				
Hand sanding	Dusts and other fine particles	Dust	✓	✓	✓	✓	✓	✓								
Machine sanding	Dusts and other fine particles	Dust and flying particles	✓	✓	✓	available with foam insert	✓	✓	✓			✓				
Mixing paint (where there is sufficient ventilation)**	Solvent-based paint	Chemical splashes and/or vapours						✓	when vapours are present	when vapours are present	✓	✓				
Painting & spraying**	Solvent-based paint	Chemical splashes and/or vapours						✓	when vapours are present	when vapours are present	✓	✓				
Polishing & compounding	Dusts and other fine particles	Dust	✓	✓	✓	✓	✓									
Welding	Welding arc and fume	UV/IR light Dust					✓ with 2805					✓ with 5E-11 visor	✓	✓	✓	✓

#### Key

✓ May be suitable for use



## 3M™ Headgear G500

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.

### Typical Applications

- ▶ Machine sanding
- ▶ Grinding
- ▶ Chemical splash

### Features and benefits:

#### Front cover

- ▶ Design incorporates a cable holder for PELTOR Communication products

#### Face shield

- ▶ A range of visors and face shields available
- ▶ Offers a wide field of view

#### Integrated eyewear

- ▶ To increase eye protection G500 headgear can incorporate integrated eyewear
- ▶ Available in clear and yellow
- ▶ 3M V6 Integrated Eyewear reduces interference with hearing protection

#### Ratchet harness

- ▶ Ergonomically designed neck support gives excellent comfort for long periods of time
- ▶ 3 height adjustment positions
- ▶ 8 head size adjustments

#### Robustness

- ▶ 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
- ▶ Compatible with 3M Optime™, 3M PELTOR™ X-Series and 3M Communications Solutions



### 3M™ Industrial Combination G500

- 3M™ Headgear G500
- Clear PC Face Shield 5F-11
- 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



#### 3M™ Face Shields

The wide range of visors allows for many industrial combinations

#### Polycarbonate Face Shields 5F-11/5E-11

- Available in clear and Shade 5
- EN166:2001 Approved
- 5F-11: 2C-1.2 3M
- 1:B:3:8
- 5E-11: 5 3M 1:B:3







## 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.

### Typical Applications

- ▶ Welding, assistant (2805)
- ▶ Gas cutting (2805)
- ▶ Hand sanding
- ▶ Dry sanding
- ▶ Adhesives handling
- ▶ Polishing

### 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:** Clear  
**Lens material:** polycarbonate  
EN 166:2001  
EN 170:2002

#### 3M™ Overspectacles 2805

**Lens colour:** Welding Shade 5  
**Lens material:** polycarbonate  
EN 166:2001  
EN 170:2002



#### 3M™ Overspectacles 2802

**Lens colour:** amber  
**Lens material:** polycarbonate  
EN 166:2001  
EN 170:2002





## 3M™ SecureFit™ 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 need for adjustable parts. It simply adjusts to fit a wide array of head sizes, reducing the need to stock multiple frame sizes. The 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.

### Typical Applications

- ▶ Hand sanding
- ▶ Dry sanding
- ▶ Adhesives handling
- ▶ Polishing

### 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
- ▶ 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 SF201AS-EU

**Lens colour:** clear  
**Lens material:** polycarbonate  
Optical Class 1  
2C-1.2 lens provides UV protection and good colour recognition  
EN 166:2001  
EN 170:2002

#### 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  
EN 166:2001  
EN 170:2002



#### 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  
EN 166:2001  
EN 172:1994





# 3M™ SecureFit™ Spectacles 400 Series

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.

## Typical Applications

- ▶ Hand sanding
- ▶ Dry sanding
- ▶ Adhesives handling
- ▶ Polishing

## Features and benefits:

### Style

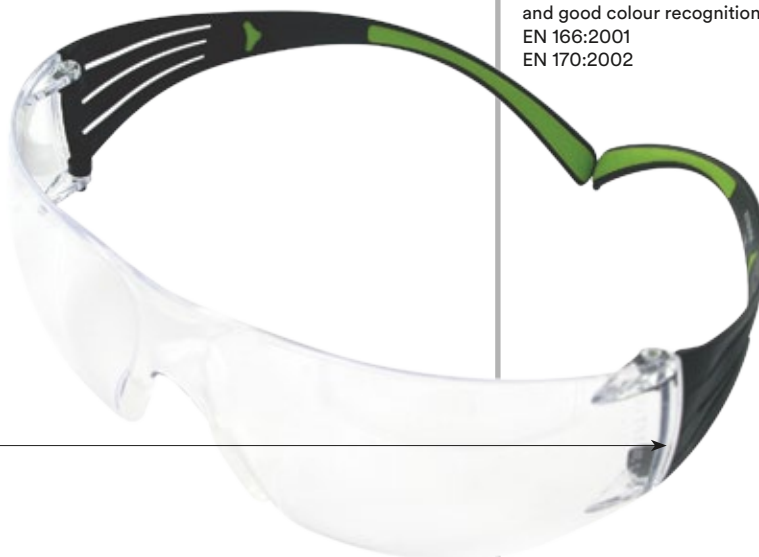
- ▶ Sleek, streamline design
- ▶ The robust temple design gives great performance and make adjustable features redundant
- ▶ Motion inspired, contoured piping in a bold, modern colour palette for an added infusion of style

### Premium protection

- ▶ Provides impact protection for the orbital region of the eye
- ▶ 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 nose pads for even greater personalisation of fit



### 3M™ SecureFit™ Comfort Line Spectacles SF401AF-EU

**Colour:** clear  
**Lens material:** polycarbonate  
 Optical Class 1  
 2C-1.2 lens provides UV protection and good colour recognition  
 EN 166:2001  
 EN 170:2002

### 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  
 EN 166:2001  
 EN 170:2002



**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  
 EN 166:2001  
 EN 172:1994



**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  
 EN 166:2001  
 EN 172:1994



**3M™ SecureFit™ Comfort Line Spectacles SF402AF-EU**  
**Lens colour:** grey  
**Lens material:** polycarbonate  
 Optical Class 1  
 5C-3.1 lens provides UV protection and glare reduction  
 EN 166:2001  
 EN 172:1994





# 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.

## Typical Applications

- ▶ Welding, assistant (2845)
- ▶ Gas cutting (2845)
- ▶ Hand sanding
- ▶ Dry sanding
- ▶ Adhesives handling
- ▶ Polishing
- ▶ Surface inspection (2846)

## 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)



### 3M™ Comfort Line Spectacles 2840

**Lens colour:** clear  
**Lens material:** polycarbonate  
 EN 166:2001  
 EN 170:2002

### 3M™ Comfort Line Spectacles 2842

**Lens colour:** amber  
**Lens material:** polycarbonate  
 EN 166:2001  
 EN 170:2002



### 3M™ Comfort Line Spectacles 2846

**Lens colour:** red-orange  
**Lens material:** polycarbonate  
 EN 166:2001  
 EN 170:2002



### 3M™ Comfort Line Spectacles 2845

**Lens colour:** IR shade 5  
**Lens material:** polycarbonate  
 EN 166:2001  
 EN 169:2002



### 3M™ Comfort Line Spectacles 2844

**Lens colour:** indoor outdoor mirror  
**Lens material:** polycarbonate  
 EN 166:2001  
 EN 172:1994







## 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.

### Typical Applications

- ▶ Hand sanding
- ▶ Dry sanding
- ▶ Adhesives handling
- ▶ Polishing

### 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

EN 166:2001

EN 170:2002

EN 172:1994

#### 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.



## 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.

### Typical Applications

- ▶ Welding, assistant (2895)
- ▶ Gas cutting (2895)
- ▶ Machine sanding
- ▶ Grinding (2890 & 2890S)
- ▶ Adhesives handling
- ▶ Polishing
- ▶ Paint preparation (2890SA & 2890S)
- ▶ Paint spraying (2890SA & 2890S)

### 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

#### Comfort

- ▶ Easy-to-adjust strap for stable and comfortable wear
- ▶ Pivoting ratchet for convenient personal adjustment
- ▶ Replacement lens options for 2890/2890S 2890A/2890SA
- ▶ Suitable for use with 3M™ Respirators



#### 3M™ Goggles 2890

**Lens colour:** clear  
**Lens material:** polycarbonate  
 EN 166:2001

**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





# Welding Protection

 **Speedglas**<sup>™</sup>























## 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.

## Our Welding Helmets – sorted by features

	<b>3M™ Welding Helmet 10V</b>							
	<b>3M™ Speedglas™ Welding Helmet 9100</b>							
	<b>3M™ Speedglas™ Welding Helmet 100</b>							

 Premium eye protection	 Side windows	 Auto-on*	 Graphics option
 Passive option	 Hearing protection**	 Exhaust vents	

\* Only in combination with 3M™ Speedglas™ Welding Filter 9100XXi  
 \*\* 3M™ PELTOR™ Hearing Protection available as accessories, see Speedglas product catalogue.





## 3M™ Welding Helmet 10V

Our entry level, high-performing auto-darkening welding helmet.

### Features and benefits:

- ▶ Robust, industrial design
- ▶ Lightweight – only 390 gram (including auto-darkening welding filter)
- ▶ Can be worn with safety spectacles and/or disposable respirators
- ▶ 3M™ Welding Helmet 10V has been shown to meet the Basic Safety Requirements under article 10 of the European Directive 89/686/EEC and is thus CE marked. The product complies with the harmonised European Standards EN 175, EN 166, and EN 379



### 3M™ Welding Helmet 10V

Part Number: 10 11 01

### 3M™ Welding Helmet 10V Consumables

Part Number	Description	Quantity
126000	Outer Protection Plate Standard for 10V Helmet	1 per pack
428000	Inner Cover Plate for 10V Helmet	5 per pack
167410	Sweat Band fleecy Cotton for 10V Helmet	1 per pack



### 3M™ Welding Helmet 10V

Technical Data	
Rated for	MIG, Stick, TIG (> 20 A)
Switching time, light-dark	0.1 ms @ 73°F (23°C)
Switching time, dark-light	40–250 ms
UV/IR protection	Shade 12 (permanent)
Viewing area	3.66 × 1.73 in (93 × 44mm)
Light state	Shade 3
Dark state	Shade 10–12 (variable)
Battery lifetime	2500 hours



# 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.



## Features and benefits:

- ▶ 3M™ Speedglas™ Welding filter 100V: five adjustable dark shades 8-12 and a light shade of 3. Three sensitivity settings
- ▶ 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 100. Black with 100V filter

Part Number: 75 11 20  
High-end features, low-end price

#### Make a visual impact

In addition to the black model, you can choose from several highly expressive graphic helmet designs.



Speedglas welding helmet 100 Skull Jewels with 100V filter  
Part Number: 75 19 20



Speedglas welding helmet 100 Blaze, with 100V filter  
Part Number: 75 12 20



Speedglas welding helmet 100 Razor Dragon with 100V filter  
Part Number: 75 24 20

### 3M™ Speedglas™ Welding Helmet 100 Series Consumables

Part Number	Description	Quantity
776000	Outer Protection Plate Standard for 100 Helmet	10 per pack
428000	Inner Cover Plate for 100 Helmet	5 per pack
168012	Sweat Band fleecy Cotton for 100 Helmet	2 per pack



## 3M™ Speedglas™ Welding Helmet 9100 with filter 9100V

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  
2008

### Features and benefits:

- ▶ A selection of welding filters with superior optical performance for continuous viewing comfort. Arc detection down to 1 amp TIG
- ▶ High-comfort 3M™ Speedglas™ Headband
- ▶ Large coverage for ear and side of head
- ▶ SideWindows: Shade 5 filters that widen your field of vision
- ▶ Meets the requirements of mechanical resistance to high speed particles according to EN 175 class B
- ▶ 100% compatible with our top-of-the-line series of 3M™ Speedglas™ Welding Filter Series 9100
- ▶ Exhaust vents readily direct exhaled air out of the helmet, reducing likelihood of a foggy welding filter



### 3M™ Speedglas™ Welding Helmet 9100 with SideWindows and filter 9100V

Part Number: 50 18 05  
Designed for your ultimate protection



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 Consumables

Part Number	Description	Quantity
526000	Outer Protection Plate Standard for 9100 Helmet	10 per pack
528005	Inner Cover Plate for 9100V Filter	5 per pack
168015	Comfort Sweat Band for 9100 Helmet	3 per pack





# Protective Coveralls











## 3M™ Protective Coveralls

From cleaning and machine maintenance to grinding and paint spraying, the range of 3M™ Protective Coveralls are CE certified and offer protection against many hazards typically found in a bodyshop environment. The range 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.

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
		1 – Gas Tight	EN 943-1	N/A*
		2 – Non-gas tight	EN 943-1	N/A*
CE Category III 		3 – Liquid Jet Protection	EN 14605 + A1	N/A*
		4 – Liquid Spray Protection	EN 14605 + A1	N/A*
		5 – Hazardous Particulate Protection	EN ISO 13982	4510, 4520 & 4520CS, 4532+, 4535, 50198
		6 – Liquid Splash Protection	EN 13034 + A1	
CE Category I		CE Simple		50425

\* Contact your 3M Representative for more on solutions which may not be included here.

### 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





# 3M Product Selection Guide



3M	50425	4510	4520 & 4520CS	4532+	4535	50198
	Category 1	Category 3	Category 3	Category 3	Category 3	Category 3
CE Certification**						
Material weight	67gsm	47gsm	43gsm	52gsm	55gsm laminate 43gsm SMMMS	60gsm laminate 54gsm SMMS
Size	M-2XL	S-4XL	S-4XL Note: 4520CS M-2XL only	S-4XL	S-3XL	M-2XL
Colours						
Cleaning and area maintenance	●					
Dusting, sanding and polishing	●	●	●	●	●	●
General body and mechanical work and preparation	●	●	●	●	●	●
Metal polishing and dusts from metal grinding		●	●	●	●	●
Paint spraying (water based paint, non-hazardous)	●	●	●	●	●	●
Paint spraying & powder coating		●	●	●	●	●
Coating & resin applications		●		●	●	●
Machine maintenance, oil/greasy environments		●				

● 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](http://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™ Reusable Coverall 50425



The 3M™ Reusable Coverall 50425 provides user and garment protection in a wide variety of environments and situations. Extremely comfortable, it is made from a lightweight, breathable polyester.

The coverall has wide leg openings with adjustable hook and loop straps around the ankle, making it easy to put on and remove, even when wearing boots.

### Typical Applications

- ▶ Paint spraying (water based paint, non-hazardous)
- ▶ Dusting, sanding and polishing
- ▶ General body and mechanical work and preparation
- ▶ Cleaning and area maintenance

### Features and benefits:

- ▶ Two-piece hood with toggle for head protection & adjustable fit
- ▶ Robust, two-way zipper covered by a protective stormflap. Storm flap has hook & loop fasteners for a secure yet reusable closure
- ▶ Knitted cuffs for secure yet comfortable fit
- ▶ Three pockets, two on the front and one on the back
- ▶ Hook & Loop fasteners on ankles for an adjustable encapsulating fit
- ▶ Triangle acts as a vented back panel for extra comfort & reduced heat stress
- ▶ Front pockets provide easy two-way access to the wearer's clothes and pockets beneath the coverall
- ▶ Integrated knee pads offer users both added comfort and protection when working in a kneeling position
- ▶ Robust 67gsm material
- ▶ Anti-static treated material to prevent nuisance discharges
- ▶ Low-linting



### 3M™ Reusable Coverall 50425

**Colour:** Grey with blue back panel

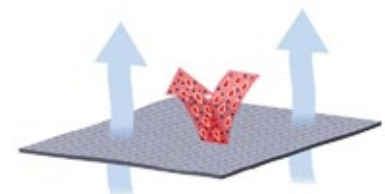
CE Simple, Category I

Sizes: M-2XL



### Fabric material

The 3M reusable coverall 50425 is made from a breathable, comfortable yet robust polyester material. The woven fibres offer strength whilst the antistatic treatment minimises static discharge during wear.



### Seam Technology

Seams are serged





## 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 standards. 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

- ▶ Paint spraying & powder coating
- ▶ Coating & resin applications
- ▶ Metal polishing and dusts
- ▶ Dusts from metal grinding

### 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



### 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
- ▶ Favoured for spot repair jobs and suitable for use with collared coveralls



### 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
- ▶ Elasticated closing on top of sleeve and around the wrist for a secure fit
- ▶ Anti-static treated



### 3M™ Protective Coverall 4510 Type 5/6

Colour: White

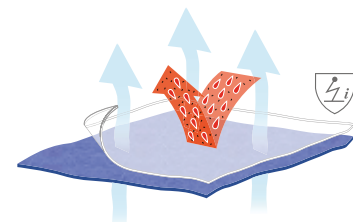
CE Category III

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 4520 & 3M™ Protective Coverall 4520CS



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.

The 3M™ Protective Coverall 4520CS has 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 or for those applications not requiring a hood.

### Typical Applications

- ▶ Metal polishing and dusts
- ▶ Dusts from metal grinding
- ▶ Light paint spraying/powder coating
- ▶ Light industrial cleaning
- ▶ Machine maintenance

### 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 4520CS

- ▶ Also available with a standard collar finish on the neck, for when a hood is not required or interferes with alternative head, face or respiratory protection
- ▶ Sizes: M-2XL

### 3M™ Protective Coverall 4520 Type 5/6

Colour: White with green back panel

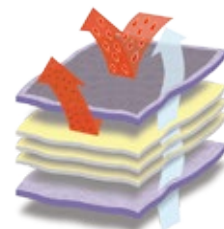
CE Category III

Sizes: S-4XL



### Fabric Material

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 4532+



The 3M™ Protective Coverall 4532+ 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

- ▶ Metal polishing and dusts
- ▶ Dusts from metal grinding
- ▶ Oil/greasy environments
- ▶ Painting and coating
- ▶ Light industrial cleaning
- ▶ Machine maintenance

### Features and benefits:

- ▶ Specialist coatings enable this product to be used in many applications not usually suitable for SMS Based coveralls
- ▶ 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



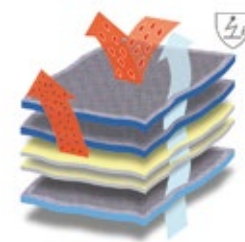
CE Category III

**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

- ▶ Coating & resin applications
- ▶ Light industrial cleaning
- ▶ Machine maintenance
- ▶ Paint spraying & powder coating
- ▶ Metal polishing and dusts
- ▶ Dusts from metal grinding

### 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



### Overboots

#### 3M™ Overboot 450



Slip Resistant Sole

#### 3M™ Overboot 440



Standard 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™ Protective Coverall 4535 Type 5/6

Colour: White with blue back panel

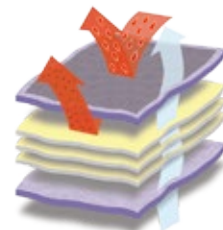
CE Category III

Sizes: S-3XL

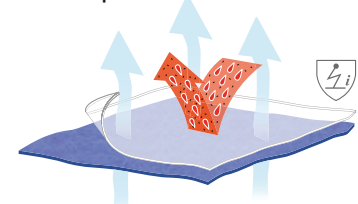


#### Fabric Material

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 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™ Paintshop Coverall 50198



The 3M™ Paintshop Coverall 50198 is CE Certified Category III to Type 5/6 standards. It is certified to EN 119 to reduce the build up of static charge. Made from a super low-linting robust laminate on the front, it offers a breathable SMMS triangle in the back to offer the optimum balance between protection and comfort.

## Typical Applications

- ▶ Machine maintenance
- ▶ Paint spraying & powder coating
- ▶ Coating & resin applications
- ▶ Metal polishing and dusts
- ▶ Dusts from metal grinding

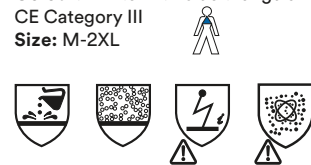
## Features and benefits:

- ▶ Excellent barrier against dry particles and certain limited liquid chemical splash (CE Type 5/6)
- ▶ Self adhesive pocket included with each suit (made from laminated material)
- ▶ 3-panel hood design for enhanced compatibility with complimentary PPE
- ▶ 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
- ▶ Super low-linting microporous laminate material with breathable low linting SMMS triangle
- ▶ 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 case with die cut to act as a storage option with easy access



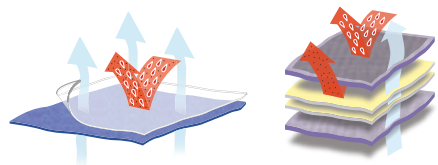
### 3M™ Paintshop Coverall 50198 Type 5/6

Colour: White with blue triangular back panel  
 CE Category III  
 Size: M-2XL



#### Fabric Material

The front of the 3M paintshop coverall 50198 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 protective fabric. The large blue back panel is made from 4 layers of spunbond and meltblown polypropylene (SMMS) giving excellent breathability, whilst maintaining the Type 5/6 level of protection.



#### Seam Technology

Seams are serged for Type 5/6 and certain seams bound for extra protection.







[www.3Mbodyshop.co.uk](http://www.3Mbodyshop.co.uk)

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