



3M Occupational Health & Environmental Safety Division EMEA Region 3M Centre, Cain Road Bracknell, Berkshire, RG12 8HT United Kingdom Office: +44 0 1344 858000 www.3M.eu/occsafety

Please recycle. Printed in Belgium. © 3M 2010. All rights reserved. Blondé Communication

# Take your Safety personally



### Service and Know-how for our customers

### www.3M.eu/occsafety



### 3M Health & Safety Helpline +44(0)870 60 800 60

Find out more and visit our Website www.3M.eu/occsafety

### Solutions

Have a look at 3M's product and service offerings – tailored specifically to your industry/applications. We have put together information for you that can help you with the choice of personal protective equipment products, for example, or with finding training programs.

### **Document Overview**

To help you find what you're looking for, various brochures and datasheets are available for download here. <section-header><section-header><section-header><section-header><section-header><text><text><text><text><text><text><text><text><text><text><text><text>

ЗМ

#### Products

The entire range of Personal Protective Equipment (PPE) by 3M is presented in this catalogue and you also have access to our interactive product catalogue on the web.

### News and Events

Keep up to date. Our website offers you interesting news on the subject of occupational safety. Find out about exhibitions where 3M is represented.



### **Customer Service**

We will help you wherever we can – for example, if you are looking for dealers, contacts, or products.

### About 3M

3M – a global, diversified technology company. For more than 100 years, people around the world have looked to 3M for products and ideas that can help solve problems and make their lives easier. According to that philosophy 3M Occupational Health and Environmental Safety Division is committed to deliver to you innovative and differentiated products for safety and protection. Serving customers in more than 200 countries around the world, we use our expertise, technologies and global strength to lead in major markets. For more general information about 3M, including the latest product and technology news, visit our corporate website www.3M.com



### **Training and Service**

3M's product training is based on many years of customer research, conducted in the field of occupational health and safety. Experts from throughout the safety world are invited to our customer events to discuss topical issues regarding health and safety in the workplace. This enables us to offer comprehensive support for safety inductions and provide easy-to-use training tools. Our training is designed to meet the individual needs of your company; your safety being at the heart of everything we do.

If you are interested in training and seminars, please contact your local 3M office where we will be more than happy to assist you in your health and safety needs.



### Pandemic Preparedness and 3M

Forward planning reduces the risk of significant disruption in case of a pandemic outbreak situation.

3M's experience and competence in supporting authorities, healthcare workers and general industry can help you in pandemic preparedness planning.

### Our service is built upon:

- Over 30 years of experience in developing and producing respiratory protective equipment
- In-depth expertise available through a global infrastructure
- Competent consultancy, planning and training

Globally, 3M has helped Public Health officials and corporations in more than 35 countries with its demand planning tools and health and safety services. These tools provide a customised picture to mirror and validate your emergency response plans. By allowing the organisation to enter its own risk assumptions, the tools define minimum readiness levels that can be used for activity planning, budgeting and logistics processes. Having the proper equipment and supplies ready, and in the right quantities when needed, is a critical component of successful emergency planning and response activities.



# Take your Safety personally

### Introduction to 3M's Occupational Health and Environmental Safety Division

As one of the worlds's leading suppliers of safety and protective equipment our goal is to ensure that we satisfy your needs through the provision of exceptional leadership, expertise, quality and service excellence. Our success is measured by your success. If we can make your life and that of your workforce easier, healthier, safer and more productive we are moving in the right direction.

We believe that health and safety is first and foremost about safeguarding worker welfare. A secure, safe working environment is paramount in any business. But we also believe that improving worker protection, comfort, durability and productivity is a more ambitious goal; one we firmly believe in.

### 3M Takes Responsibility – for Environment, Health and Safety

In addition to protecting peample, we want to protect the environment as well. It is, therefore, our declared goal to develop and use safe products that have the least possible impact on people, the environment and the workplace. All 3M subsidiaries and business units are highly committed to achieving this goal in their daily work.

















Maintenance Free Particulate Respirators

Half & Full Face Masks

S Si

Powered & Supplied Air Systems

& Speedglas™ Air Welding Safety

Hearing Protection Co So

Communication Solutions

Head and Face Protection

Page 6

Page 22

Page 34

Page 58

Page 66

Page 78

Page 90

### Your health and safety matters

At 3M we don't take safety for granted. the health and welfare of your workforce depends on it. So, by working in association with skilled safety practitioners, partners and customers, our people are committed to ensuring that we help you create an environment that protects yout workforce - effectively, efficiently and economicallly.

### Your success is our achievement

To deliver on our commitment requires a culture of accountability, customer inspired innovation, knowledge and expertise, fuelled by a deep understanding of your needs and the safety needs of your workforce.

With our global technology, manufacturing and knowledge network we do more than simply develop products that ensure your workforce can operate in safety and comfort. We go further to provide good design, cross-over compatibility, expertise, comprehensive support and a continuously evolving range of product solutions.



Eye Protection





Emergency Response Solutions







**Visibility Products** 

Insulation Products

Sorbents

Page 92

Page 112

Page 120

Page 124

Page 132

Page 136



# Maintenance Free Particulate Respirators

State of the art features set 3M apart from conventional respirators in the market. Our  $3M^{TM}$  High Performance Filter Media combines the benefits of mechanical filtration with advanced technology filtration to capture particles and the  $3M^{TM}$  Cool Flow<sup>TM</sup> Valve reduces heat build up.

Combined with ergonomic design for superior comfort, our wide range of proprietary technologies help to deliver easier breathing and comfortable protection against particle hazards. All products featured in this section are exempt from record keeping requirements. Selecting and specifying the appropriate respiratory protective equipment may appear daunting with multiple factors to consider. The equipment needs not only to provide appropriate protection for the job, but should also be comfortable enough for the individual user to wear during the whole period of exposure.



### The Selection of Respiratory Protection Equipment follows a basic four-step method:

- Identify the Hazards –
   dust, metal fume, gas, vapour etc.
- 2 Assess the Risk assess the hazard levels against safety standards and consider other protection skin, eye and body
- **3** Select the Right Respirator disposable, reusable, half face mask, full face mask, powered, supplied air etc.
- 4 Train in Fitting and Use to optimise respiratory protection



### 3M<sup>™</sup> Maintenance Free Particulate Respirators 3M Four Step Method

### 1. Identify the Hazards

Application*		Performance level	Important information
	Rust, Metal Particles, Filler	P1	
Sanding,	Concrete, Stone	P1	P2 When quartz concentration is high
Cutting,	Cement, Wood, Steel	P2	
	Paints/Varnish/Anti-rust coating	P2	P3 When Chromates are present
Drilling	Steel, Stainless Steel	P3	
	Anti-Fouling Varnish	P3	Speciality respirator maybe required
Low temp. oil spray		P2	
	Mild Steel, Zinc (Autogen, MIG/MIK)	P2	3M <sup>™</sup> 9928 or 3M <sup>™</sup> 9925 for Ozone protection
Welding	Stainless Steel (Electrodes)	P2	9928 or 9925 for Ozone protection
	Soldering	P2	
Work with Asbestos	Small amounts infrequent exposure	P2	P3 for additional protection
Work with Glass and Mineral fibres		P2	
Waste Sorting		P3	May need gas & vapour respirator
Sproving	Paint spray	P2	May need gas & vapour respirator
Spraying	Pesticides (water based)	P2	
Utility maintenance (e.g. filter change)		P3	
Allergies	Pollen, Animal dander	P1	
Allergies	Grain dust	P2	
	Mold/Fungus	P2	
Contact with:	Bacteria	P2	P3 With Tuberculosis
	Diesel exhaust/Smoke	P2	

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

### 2. Assess the Risk

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

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

### 3. Select the Right Respirator

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



### 3M<sup>™</sup> Cup-Shaped Respirators

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



### 3M<sup>™</sup> Buckle Strap Respirators

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



### 3M<sup>™</sup> Foldable Respirators

- + Comfort Series Flat Fold only: Individually packed, foldable design prevents contamination before use and allows easy storage





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

### 4. Train in Fitting and Use

### **Training Offered by 3M**

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

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

### Advantages of 3M<sup>™</sup> Particulate Respirators

Integrating the voice of the customer into over 40 years of product development allowed innovations such as the 3M<sup>TM</sup> Cool Flow<sup>TM</sup> Valve to reduce heat build up in a respirator and the 3M<sup>TM</sup> High Performance Filter Media which offers protection against hazardous particles and easier breathing.

In addition to quality products, 3M continues to provide expert support for proper respirator selection – all leading to satisfied customers worldwide.

### EN 149:2001+A1:2009 Amended Standard

EN 149:2001 was superseded by an amended version, EN 149:2001+A1:2009 (EN 149+A1) in July 2009. By the 31st July 2010, all maintenance free particulate respirators will need to be tested to the requirements of the amended standard and then re-approved to the PPE directive.

### Changes introduced by EN 149:2001+A1:2009

EN149+A1 introduced two new product usability classifications and new performance requirements. The changes are intended to give the user further confidence in respirators providing continuous respiratory protection in the most challenging of environments. Also, for reusable respirators to replicate the cleaning, storage and reuse between shifts. The major changes are detailed below;

### 1. Single Shift Use Only Devices (classification and product marking "NR")

- + Altered conditioning requirements prior to testing
- New exposure test a long-term continuation of the initial filter penetration test
- Optional testing to the clogging requirements (classification and product marking "D")
- + Example marking: EN 149:2001+A1:2009 FFP2 NR D

### 2. Reusable Devices

### (classification and product marking "R")

- + Altered conditioning requirements prior to testing
- New cleaning and disinfection test upon the product prior to existing filter penetration test
- New exposure test a long-term continuation of the initial filter penetration test.
- + New 24 hour storage test post-exposure.
- + New repeat filter penetration test post-storage
- Mandatory testing to the clogging requirements (classification and product marking "D")
- + Example marking: EN 149:2001+A1:2009 FFP3 R D

### 3M<sup>™</sup> Maintenance Free Particulate Respirators



### The importance of comfort

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

### Here's what to look for:





### Breathing ease

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



Coolness

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



### Face and head comfort

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







#### Skin comfort

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

#### Lightweight

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

### Size

Selecting the correct type and size of respirator is important for comfort and protection. If the respirator is too big or bulky, it may interfere with the field of vision. If it is too small, it may be uncomfortable and difficult to communicate.

### Compatibility with other PPE

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



### The importance of fit

Maintenance free respirators are most effective when there is a good seal between the edges of the respirator and your face. The instant this

seal is broken, protection is compromised as contaminated air can leak in through any gaps.

### Here's what to look for:

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





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



Long hair should be tied back.



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



#### **Fit Check**

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

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





One type and size of respirator may not fit everyone. On initial selection of a respirator, fit testing should be used to find an appropriate product for you. For information on fit testing procedures, contact your safety officer or 3M.

### 3M<sup>™</sup> Maintenance Free Particulate Respirators



### **Classic Series: Flat Fold K100 Series**

Safety is priceless, but it doesn't have to be expensive. With 3M<sup>™</sup> K100 Series Respirators, 3M have applied the best of their expertise to bring you solid, professional protection at an affordable price.

The 3M K100 flat-fold respirators are made of strong stuff, for tough work. They are designed to be wearer-friendly, with the comfort and convenience workers need to make a long and demanding shift a little

easier to face. As well as removing the need for costly, time-consuming maintenance, the 3M K100 Series also removes any doubt as to quality when it comes to choosing a value product: fully tested, certified and CE marked, all 3M K100 products are also backed with the kind of responsive support, access to technical personnel, reliable advice as well as dependable quality and supply that only a brand like 3M can offer.

### **Features and Benefits:**

### Adjustable noseclip

- + Easy to check that correct protection is being worn in the workplace
- Yellow: FFP1, blue: FFP2, red: FFP3 as per EN149:2001+A1:2009
- + Metal detectable

### Synthetic headbands

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

### Single loop strap

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

### **Flat-fold convenience**

 Makes the respirator easy to store away when not in use

### **Classic Exhalation valve**

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

### **Diamond-shaped front panel**

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

### Compatibility

- + With most eyewear and
- hearing protection from 3MMeets clogging requirements as per
- EN 149:2001+A1:2009
- + Ensures prolonged respirator life while maintaining ease of breathing

3M<sup>™</sup> High Performance Filter Media



### 3M<sup>™</sup> K112 Particulate Respirator Classification: EN 149:2001+A1:2009 FFP2 NR D Protection: Dust/Mist Maximum Usage Level: Up to 12 x TLV

FFP2

Unvalved



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

#### FFP1

3M™ K101 Particulate Respirator Classification: EN 149:2001+A1:2009 FFP1 NR D Protection: Dust/Mist Maximum Usage Level: Up to 4 x TLV

#### FFP2

3M<sup>™</sup> K102 Particulate Respirator Classification: EN 149:2001+A1:2009 FFP2 NR D Protection: Dust/Mist

Maximum Usage Level: Up to 12 x TLV

Valved

### 3M<sup>™</sup> K111 Particulate Respirator Classification:

EN 149:2001+A1:2009 FFP1 NR D Protection: Dust/Mist Maximum Usage Level: Up to 4 x TLV

### FFP3

FFP1

3M™ K113 Particulate Respirator Classification: EN 149:2001+A1:2009 FFP3 NR D Protection: Dust/Mist Maximum Usage Level: Up to 50 x TLV



### **Classic Series: Cup Shaped**

The 3M<sup>™</sup> 8000 Series Respirators 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 unique valve in the 3M<sup>™</sup> 8822 and 3M<sup>™</sup> 8812 Respirators and collapse resistant shell offers durable, comfortable protection particularly in hot and humid conditions.

These respirators are exempt from costly, time-consuming maintenance requirements. The Classic Series forms part of your basic equipment for different work environments and complies with EN 149:2001+A1:2009. The proprietary 3M<sup>™</sup> Cool Flow<sup>™</sup> Valve technology ensures higher wearer comfort by allowing exhaled heat and humidity from your breath to escape.

### **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<sup>™</sup> Cool Flow<sup>™</sup> Valve

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

### **Compatible with**

- + Eyewear from 3M
- + Hearing Protection from 3M

### **Typical Applications**

- + Construction
- + Ship Building/Repair
- + Pharmaceuticals
- + Rubber/Plastics
- + Engineering
- + Iron and Steel Foundries
- + Agrochemicals

### 3M™ High Performance

### Filter Media

3M™ Cool Flow<sup>™</sup> Valve

- + Pottery/Ceramics
- + Laboratories
- + Agriculture

### 3M<sup>™</sup> 8822 Particulate Respirator

Classification: EN 149:2001+A1:2009 FFP2 NR D Protection: Dust/Mist Maximum Usage Level: Up to 12 x TLV FFP2

### Unvalved

### FFP1

3M<sup>™</sup> 8710 Particulate Respirator Classification: EN 149:2001+A1:2009 FFP1 NR D Protection: Dust/Mist Maximum Usage Level: Up to 4 x TLV

#### FFP2

### 3M<sup>™</sup> 8810 Particulate Respirator Classification: EN 149:2001+A1:2009 FFP2 NR D Protection: Dust/Mist Maximum Usage Level: Up to 12 x TLV

#### Valved



### FFP1

3M<sup>™</sup> 8812 Particulate Respirator Classification: EN 149:2001+A1:2009 FFP1 NR D Protection: Dust/Mist Maximum Usage Level: Up to 4 x TLV

### 3M<sup>™</sup> 8710, 8810 and 8822 Particulate Respirators also available in handy packs of 5







+ Market Gardening

- + Base Metal Manufacture
- + Foodstuffs
- + Powdered Chemicals





# Maintenance Free Particulate Respirators



### **Comfort Series: Flat Fold**

3M<sup>™</sup> 9300 Series Respirators set new benchmarks in wearer comfort. The advanced three-panel design and ultra soft inner cover-web of the 9300 series by 3M provide optimum comfort and easy communication, thus ensuring improved wearer acceptance even during long working hours. Being foldable they offer you more convenience than traditional cup shaped respirators. Its features include a headband material which helps even out strap pressure.

The proprietary 3M<sup>™</sup> Cool Flow<sup>™</sup> Valve minimises heat build-up and makes breathing easier and cooler.

These respirators are individually packed to avoid contamination during storage and the straps are colour coded, making identification of performance levels easier.

3M<sup>™</sup> 9322 Particulate Respirator

Maximum Usage Level: Up to 12 x TLV

Protection: Dust/Mist

FFP2

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

### **Features and Benefits:**

### Foldable – Proprietary 3-Panel Design

- + Accommodates greater facial movement during speech so much more comfortable to wear
- + Easy to store when not in use
- + Provides comfort and style without compromising performance

### Nose Foam

- + Made of sweat absorbent material
- + Soft on the skin
- + Easy to achieve compatible fit with evewear to reduce the risk of misting

### **High Performance Filter Material**

- + 3M<sup>™</sup> Advanced Electret Filter material provides effective filtration combined with low breathing resistance
- + Consistent high quality performance

### 3M<sup>™</sup> Cool Flow<sup>™</sup> Valve

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

### **Headbands**

- + Even strap pressure improves comfort on the neck, face and head with a secure feel
- + Colour coded to indicate performance level

Foldable

Design

### **Individual Packaging**

- + Hygienic packaging protects the respirator from contamination before use
- + Allows practical storage and dispensing in the workplace

3M™ High Performance Filter Media

Three-Panel





### Compatible with

- + Eyewear from 3M
- + Hearing Protection from 3M

3M™ Cool Flow™ Valve



### 3M<sup>™</sup> 9312, 9320, 9322 and 9332 particulate respirators

also available in handy packs of 5











3M<sup>™</sup> 9310 Particulate Respirator

FFP1

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



3M<sup>™</sup> 9312 Particulate Respirator

### FFP1

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



#### FFP2

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



### FFP3

3M<sup>™</sup> 9332 Particulate Respirator Classification: EN 149:2001+A1:2009 FFP3 NR D Protection: Dust/Mist Maximum Usage Level: Up to 50 x TLV



#### FFP3

3M<sup>™</sup> 1883 Particulate Respirator with Shrouded Valve

Classification: Meets the requirements of EN 149:2001+A1:2009 FFP3 NR D and EN14683:2005 Type IIR (Surgical Masks-Requirements and Test Methods) Protection: Solid and Non-volatile Liquid Particles

Maximum Usage Level: Up to 50 x TLV

# Maintenance Free Particulate Respirators



### **Comfort Series: Cup Shaped**

The 3M<sup>™</sup> 8300 Series Respirators are 3M's newest addition to the respiratory protection range. With them, you can enjoy a comfortable 'cushion-fit', facing hard work from a soft place.

The 3M 8300 Series respirators have been designed with comfort in mind. The super-soft, cushioned lining provides instant yet lasting

comfort; whilst the robust design makes the 3M 8300 Series Respirators tough and durable - all this helps to increase user wearability. 3M offers a comprehensive range of respiratory protection - you can choose from different protection levels and styles that best suit your needs.

3M<sup>™</sup> 8322 Particulate Respirator

Maximum Usage Level: Up to 12 x TLV

Protection: Dust/Mist

FFP2

et et et et et et

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

### **Features and Benefits:**

### **Braided Headbands**

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

### **M-Noseclip**

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

### **Robust Outer Shell**

+ The shell construction offers users added durability

### 3M<sup>™</sup> Cool Flow<sup>™</sup> Valve

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

### **High Performance Filter Material**

+ 3M<sup>™</sup> Advanced Electret filter material helps wearers to breathe easily through the respirator for more comfortable protection

### 'Cushion-Fit' Lining

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

### Soft Waffle Edge

+ The flexible, textured edge offers a comfortable and secure fit

#### 3M<sup>™</sup> High

Performance Filter Media

3M™ Cool **Face Seal** (8833 only) Flow<sup>™</sup> Valve









M-Shaped Noseclip

3M<sup>™</sup> 8833 particulate respirators are also available in handy packs of 5



### **Typical Applications**

- + Construction
- + Agriculture
- + Quarrying
- + Pottery/Ceramics
- + Engineering
- + Quarrying
- + Pharmaceuticals
- + Sawmills
- + Chemical
- + Automotive
- + Iron and steel foundries
- + Shipbuilding
- + Metalworking
- Asbestos







3M<sup>™</sup> 8320 Particulate Respirator





### FFP1 3M™ 8310 Particulate Respirator Classification: EN 149:2001 +A1:2009 FFP1 NR D

Protection: Dust/Mist Maximum Usage Level: Up to 4 x TLV



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



#### FFP2

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



### **3M™ 8833 Particulate Respirator** Classification: EN 149:2001 +A1:2009 FFP3 R D

FFP3

+A1:2009 FFP3 R D Protection: Dust/Mist Maximum Usage Level: Up to 50 x TLV

Braided headbands for extra comfort and durability





# Maintenance Free Particulate Respirators



### **Premium Series**

With this premium respirator series 3M offers ultimate safety, meeting the particular requirements of the clogging test for FFP (filtering face piece) respirators which may be used for more than one shift. The 3M<sup>™</sup> 8835 Respirator has exceptional comfort because of its lightweight, off-the-face design; a soft inner face-seal ring;

a large surface area providing maximum filtration and minimising the build-up of hot air inside the facepiece; an exhalation valve to reduce moisture buildup in certain work conditions; 4-point adjustable straps and an adjustable nose clip to ensure a comfortable fit.

> 3M<sup>™</sup> 8835 Particulate Respirator Classification: EN 149:2001+A1:2009 FFP3 R D

Maximum Usage Level: Up to 50 x TLV

Protection: Dust/Mist/Metal Fume

FFP3

### **Features and Benefits:**

### Soft Inner Face-Seal Ring

- + Improves face seal
- + Increases wearer comfort
- + Can be hygienically cleaned for improved wearer hygiene if used for longer than one shift (3M<sup>™</sup> 105 Face Seal Cleaner)

### **Robust Shell and Cup Design**

+ Robust and durable design provides multi-shift capability and a securer feel

### 3M<sup>™</sup> Advanced Electret Filter Media

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

### **Colour Coded Valve Lettering**

+ Easy to recognise protection level (FFP3 for 3M 8835, FFP2 for 3M 8825 respirators) by colour coding

### 3M<sup>™</sup> Cool Flow<sup>™</sup> Valve

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

### **Adjustable Braided Headbands**

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

### **Compatible with**

- + Evewear from 3M
- + Hearing Protection from 3M

3M™ High
Performance
Filter Media

3M<sup>™</sup> Cool Adjustment Flow™ Valve Face Seal **Buckle Straps** 









- + Construction
- + Ship Building/Repair
- + Pharmaceuticals
- + Welding and Soldering
- + Chemical Processing
- + Iron and Steel Foundries
- + Battery Manufacturing









### FFP2

3M<sup>™</sup> 8825 Particulate Respirator Classification: EN 149:2001+A1:2009 FFP2 R D Protection: Dust/Mist/Metal Fume Maximum Usage Level: Up to 12 x TLV



### FFP3

3M<sup>™</sup> 8835 Particulate Respirator Classification: EN 149:2001+A1:2009 FFP3 R D Protection: Dust/Mist/Metal Fume Maximum Usage Level: Up to 50 x TLV

### Adjustable wide straps for comfortable fit



Soft inner face-seal provides excellent wearer comfort and protection



### 3M<sup>™</sup> Maintenance Free Particulate Respirators



### **Welding Fume Respirators**

The 3M<sup>™</sup> 9925 and 3M<sup>™</sup> 9928 Welding Fume Respirators provide lightweight, effective, comfortable and hygienic respiratory protection against dust, mist and metal fumes and resist clogging for extended use against welding fume. The convex shape enhances wearer comfort; the 3M<sup>™</sup> Cool Flow<sup>™</sup> Exhalation Valve reduces moisture build-up, particularly in hot and humid work conditions. The 4-point adjustable straps and adjustable nose clip help achieve a comfortable fit. The 3M 9925 and 9928 respirators have been designed specifically for welding applications to provide protection against ozone and welding fumes, plus relief from nuisance odours. The 3M 9925 and 9928 respirators do not require costly and time-consuming maintenance.

### Features and Benefits:

### **Robust Shell and Cup Design**

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

### Soft Inner Face-Seal Ring (9928 only)

- + Provides secure feel
- + Improves wearer comfort
- Can be hygienically cleaned (3M<sup>™</sup> 105 Faceseal Cleaner)

### 3M<sup>™</sup> Cool Flow<sup>™</sup> Valve

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

### **Colour Coded Valve Lettering**

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

### **Carbon Layer**

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

### **Adjustable Braided Headbands**

+ Help provide comfort to face, head and neck

### **Compatible with**

- + Eyewear from 3M
- + Hearing Protection from 3M
- + 3M<sup>™</sup> Speedglas<sup>™</sup> Welding Headtop
- Welding shields low profile design for compatibility with welding shields

### 3M™ High

Performance Filter Media Adjustment 3M™ ( Buckle Straps Flow™

3M<sup>™</sup> Cool Face Seal Flow<sup>™</sup> Valve (9928 only

(9928 only) Activated Carbon









3M<sup>™</sup> 9928 Welding Particulate Respirator Classification: EN 149:2001+A1:2009 FFP2 R D Protection: Dust/Mist/Ozone/Nuisance level odours Maximum Usage Level: 10 x TLV for Ozone 10 x TLV for Particulates Below TLV for nuisance odours

FFP2

Other 3M<sup>™</sup> Welding Maintenance Free Particulate Respirators available



3M<sup>™</sup> 9925 Welding Particulate Respirator Classification: EN 149:2001 FFP2 NR D Protection: Dust/Mist/Ozone/Nuisance level odours Maximum Usage Level: 10 x TLV for Ozone 10 x TLV for Particulates

### **Typical Applications**

- + Construction
- + Base Metal Manufacture
- + Ship Building/Repair
- + Potteries
- + Powdered Chemicals
- + Welding and Soldering
- + Iron and Steel Foundries
- + Metal Manufacture
- + Paint Manufacture



3M<sup>™</sup> 9925 particulate respirators are also available in handy packs of 5



### **Speciality Series Respirators**

The Speciality Respirators by 3M have been developed for particular working environments. These respirators feature an integrated activated carbon layer thus offering relief from nuisance odours below TLV. They can be used for a wide variety of applications ranging from welding to waste sorting.

The Speciality range by 3M provides lightweight, effective, comfortable and hygienic respiratory protection against dust and mist. It also provides additional relief from low levels of organic vapours or acid

gases such as sulphur dioxide and hydrogen fluoride (depending on the product type). The convex shape, twin strap design, foam nose seal and nose clip ensures comfortable wear over a range of face sizes. The proprietary 3M<sup>™</sup> Cool Flow<sup>™</sup> Valve on the 3M<sup>™</sup> 9914, 3M<sup>™</sup> 9922, 3M<sup>™</sup> 9926 and 3M<sup>™</sup> 9936 respirators and collapse resistant shell featured in all products offer both durable and comfortable protection particularly in hot and humid conditions. These respirators do not require costly and time consuming maintenance.

### **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 Advanced Electret Filter Media**

- + Effective filtration combined with low breathing resistance
- + Consistent high quality performance

### 3M<sup>™</sup> Cool Flow<sup>™</sup> Valve

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

#### **Carbon Layer**

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

#### **Colour Coded Straps**

+ Easy to recognise performance level by colour coded straps

#### **Compatible with**

- + Eyewear from 3M
- Hearing Protection from 3M

3M<sup>™</sup> High Performance Filter Media

Activated Carbon



3M<sup>™</sup> Cool

Flow<sup>™</sup> Valve (9936 only)







### FFP1 3M<sup>™</sup> 9915 Speciality **Particulate Respirator**

EN 149:2001+A1:2009 FFP1 NR D

Protection: Dust/Mist/Nuisance Level Acid Gas Maximum Usage Level: Up to 4 x TLV for Particulates and below TLV for Acid Gases



FFP3 3M<sup>™</sup> 9936 Speciality **Particulate Respirator** Classification: EN 149:2001 +A1:2009 FFP3 R D

Protection: Dust/Mist/Nuisance Level Acid Gas Maximum Usage Level: Up to 50 x TLV for Particulates and below TLV for Acid Gases

3M™ 9922 Speciality Particulate Respirator Classification: EN 149:2001+A1:2009 FFP2 NR D

Protection: Dust/Mist/Nuisance Level Ozone Maximum Usage Level: 10 x TLV for Ozone 10 x TLV for Particulates and below TLV for Organic Vapours



FFP2 3M<sup>™</sup> 9926 Speciality Particulate Respirator Classification: EN 149:2001+A1:2009 FFP2 NR D

Protection: Dust/Mist/Nuisance Level Acid Gas Maximum Usage Level: Up to 12 x TLV for Particulates and below TLV for Acid Gases

**Other Speciality Maintenance Free** Particulate Respirators available from 3M FFP1

3M<sup>™</sup> 9914 Speciality Particulate Respirator Classification: EN 149:2001+A1:2009 FFP1 NR D

and below TLV for Organic Vapours

Also available in handy packs of 5

Protection: Dust/Mist/Nuisance Level Organic Vapour

Maximum Usage Level: Up to 4 x TLV for Particulates



FFP1

3M<sup>™</sup> 9906 Speciality **Particulate Respirator** Classification:

EN 149:2001+A1:2009 FFP1 NR D Protection: Dust/Mist/Nuisance Level Hydrogen Fluoride Maximum Usage Level: Up to 4 x TLV for Particulates, below TLV for Hydrogen Fluoride

### FFP1 3M<sup>™</sup> 9913 Speciality

Particulate Respirator Classification:

EN 149:2001+A1:2009 FFP1 NR D Protection: Dust/Mist/Nuisance Level Organic Vapour

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

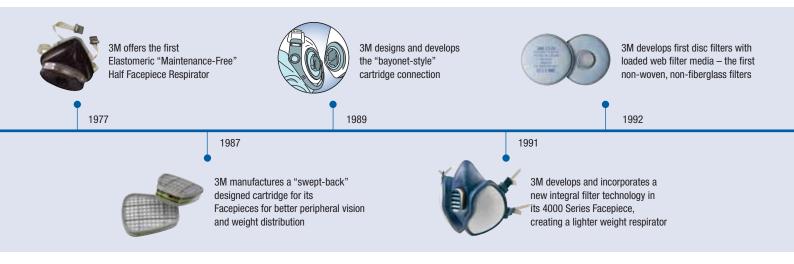


# Classification:



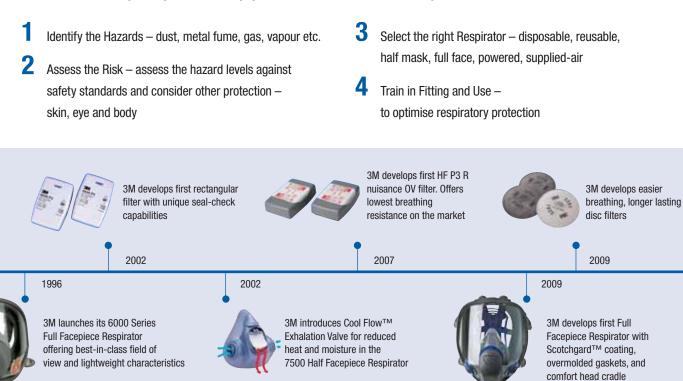


Hazardous substances are formed in many industries and applications. To help you choose the right product solution, 3M assists you to identify and assess the risk in your working environment. 3M's Half and Full Face Masks can be used with a broad range of filters that offer effective protection against gases, vapours and particles. For prolonged periods of use, Half and Full Face Masks by 3M offer exceptional value and quality, and all combine unrivalled comfort with ease of use.





### The Selection of Respiratory Protection Equipment follows a basic 3M four-step method:



M

# 3M<sup>™</sup> Half Masks & Full Face Masks



### 1. Identify the Hazards

Application	Hazard	Recommended Protection
	Solvent-Based Paint**	A2P3 R
	Anti-Fouling Paint Spraying / Grinding	A2P3 R
Deleting Opening Versiehing Costing	Water Soluble Paint	A1P2 R
Painting, Spraying, Varnishing, Coating	Solvents, Resins, Synthetic Resins**	A2P3 R
	Latex-Paint, Residual Solvents	A2P3 R
	Wood Preservatives	A1P2 R
Maintenance	Disinfection, Cleaning*	A1P2 R
Decoration	Spray-On Glue, Foam, Varnish, Adhesive	A1P2 R
Waste Removal	Bacteria, Spores, Odours	A1P2 R
Agriculture	Pesticides, Insecticides	A1P2 R
Wood Treatment	Bonding, Spray-On Glue	A2P3 R
	Tarring	A2P3 R
Construction, Grinding, Cutting, Drilling	Clamming, Sealing	A1P2 R
	Spray Foam Insulation	A1P2 R
Acid stabing	Organic Solvent/Dichloromethane	AXP3 R
Acid-etching	Ammoniacal Paint Remover	ABEK
Wolding	Polyurethane Coating**	ABEP3 R
Welding	Stainless Steel	ABEP3 R
Conting	Solvent Based Varnish	A2
Coating	Water Based Varnish	A1
Bonding	Solvent containing Adhesives	A1
	Sulphur Dioxide	ABE
	Hydrochloric Acid	ABE
Handling with	Liquid Manure	ABEK
Handling with:	Ammonia	К
	Benzene	A2
	Hazardous goods storage/transport	ABEKP3 R

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

\*\* Application limits for re usable half & fullface respirators with gas and vapour filters:

Haff masks can be used up to 50 times TLV. Full face masks can be used up to 200 times TLV (Depending on the filter) Haff masks can be used up to 50 times TLV. Full face masks can be used up to 200 times TLV (Depending on the filter) Class 1 filter up to 10 x TLV or 1.000 mg/m<sup>3</sup> (0,1 Vol%); Class 2 filter up to 10 x TLV or 5.000 mg/m<sup>3</sup> (0,5 Vol%), as the case may be to which limit is reached first.

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

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

### 2. Assess the Risk

Application limit of Particulate Respirators with removable filter

	NPF*		Important Information		
	half mask	full face mask	important information		
	4	4	not against particles of carcinogenic and radioactive materials, as well as air-transported biological substances of risk-group 2 u. 3 and enzymes		
	12	16	not against particles of radioactive materials and air-transported biological substances of risk-group 3 and enzymes		
	50	200			
4	Nominal Protection	n Factor			



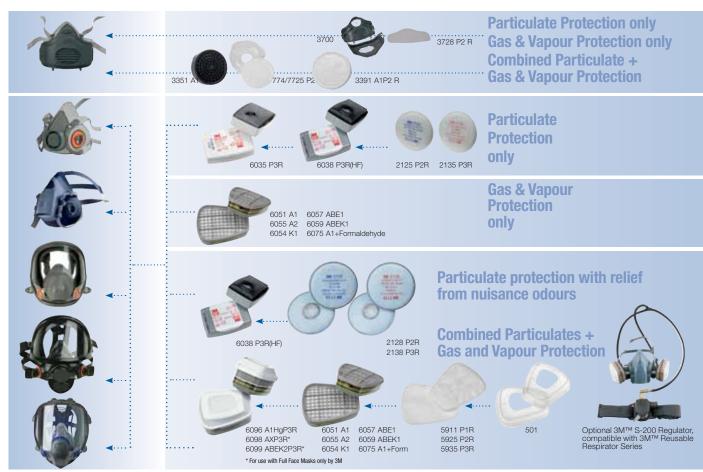
White - Particulate Protection Brown – Organic Vapours Protection Grey – Inorganic Vapours Protection Yellow – Acid Gases Protection Green – Ammonia and its Derivatives



### 3.1 Select the Right Respirator

3M <sup>™</sup> Reusable Respirator Series	4000 Series	3000 Series	6000 Series	7000 Series	6000 Series	7907S	FF-400
		X					
	Half Masks	Half Masks	Half Masks	Half Masks	Full Face Masks	Full Face Masks	Full Face Masks
Durability	٠		•	••	••	••	••
Maintenance-free	••						
Ready to use	•						
Comfort	••	•	••	••	••	•	•••
Lightweight	•	• •	••	•	••	•	
Easy to fit	••	•	•	•	•	•	•
Adjustable head bands	•	•	•	••	•	••	••
Drop Down feature				••			
Easy-to-clean design		••	•	••	••	٠	••
Quick de-assembly for maintenance				••			•
3M <sup>™</sup> Cool Flow Valve				••	••		••
Compatible with 3M Supplied Air System			••	••	••	••	
Modular replacement filter system		•	••	••	••	••	••
Variety of filters	•	•	•	•	••	••	••
Eye Protection					••	••	•
Six-point head harness						••	••
Speaking diaphragm						••	••
Spare parts			•	••	•	••	••
Accessories	•	•	••	••	••	••	••
Multiple sizes available		•	••	••	••		••
Colour coded sizes		•	••	••	••		

### 3.2 Select the Right Filter



### 3M<sup>™</sup> Half Masks & Full Face Masks



### 3M<sup>™</sup> Bayonet Filter Attachment System

The unique, compatible Bayonet Filter Attachment System allows different types of filters to just be clicked into place ensuring optimum ease of use. 3M Half and Full Face respirators stand out in terms of quality and reliability. The choice of the right mask and filter type depends on your particular working environment and individual requirements. As all respirators have to pass strict quality control tests, they provide a consistently high level of safety. We analyse with you on site which products are suitable to achieve the optimum results. Respirators by 3M offer safety and increase productivity.





### 3M<sup>™</sup> 2000 Series Particulate Filters with EN143: 2000

Filter	Protection level	Protection against
2125	P2R	solid and liquid particles
2128	P2R	Solid and liquid particles. Plus ozone protection 10 x TLV and organic vapours/acid gas below TLV
2135	P3R	solid and liquid particles
2138	P3R	Solid and liquid particles. Plus ozone protection 10 x TLV and organic vapours/ acid gas below TLV





### 3M<sup>™</sup> 6000 Series Gas and Vapour Filters

Filter	Protection level	Protection against
6051	A1	organic gases & vapours
6054	K1	ammonia and derivatives
6055	A2	organic vapours, inorganic vapours and acid gases
6057	ABE1	organic vapours, inorganic vapours and acid gases
6059	ABEK1	organic, inorganic and acid gases, ammonia and derivatives
6075	A1+ formaldehyde	organic vapours and formaldehyde

Filter aga	Filter against gases/vapours and particulate:			
6096	A1 HgP3R	organic acids and vapours, mercury vapours and particulate		
6098*	AXP3R	single compound organic vapours (boiling point below 65 °C) and particulate		
6099*	ABEK2P3R	organic vapours, inorganic and acid gases, ammonia, derivatives and particulate		

\* Only for full face masks.

The filters of the 6000 Series conform with the European Standards: EN14387 and EN143. 26

### 3M<sup>™</sup> 6035/6038 Series Particulate Filters with EN143: 2000

Filter	Protection level	Protection against
6035	P3R	solid and liquid particles – in stable plastic cage for rough application
6038	P3R	Solid and liquid particles. Hydrogen Fluoride gas up to 30 ppm and relief from nuisance level ozone, organic vapours and acid gases below TLV



### 3M<sup>™</sup> 5000 Series Particulate Filters with EN143: 2000

Filter	Protection level	Protection against		
for combination with gas filters:				
5911	P1R	solid and liquid particles		
5925	P2R	solid and liquid particles		
5935	P3R	solid and liquid particles		
501		filter retainer		



### 3M<sup>™</sup> 4000 Series Maintenance-Free Reusable Respirators

The 4000 Series Respirators by 3M are a range of ready-to-use, maintenance-free half masks designed for effective and comfortable protection against a combination of many gases, vapours and particulate hazards found throughout industry. Utilising unique filter technology enables a very low-profile design for undisturbed field of vision to make your worklife more comfortable.

### **Features and Benefits:**

### **Facepiece**

- + Low profile design for better peripheral vision
- + Lightweight, well balanced design
- + Soft, non-allergenic material with textured face seal

#### **Built In Filters**

- Four versions available, each offering protection against differing hazards throughout industry
- + One piece, maintenance-free construction

#### **Exhalation Valve**

 Central position for effective removal of heat and moisture build up within face piece

### **Adjustable Head Cradle and Neck Straps**

- + Stable secure fit
- + Easy to fasten neck strap

#### **Cost Effective**

 Use until damaged, particulate filters clog, gas filters become saturated or after one month

### Convenience

+ Resealable bag provides convenient and clean storage between uses

#### **Extras**

 → 3M<sup>TM</sup> 400 Overspray Guard pre-filter is available to help prolong the life of the main particulate filters

### **Compatible with**

- + Eyewear from 3M
- + Hearing Protection from 3M

### 3M<sup>™</sup> 4251 Maintenance-Free Respirator EN405:2001+A1:2009

### 3M<sup>™</sup> 4000 Series Maintenance Free Respirators available:

3M<sup>™</sup> 4251 Organic vapour + particulate respirator FFA1P2 R D 3M<sup>™</sup> 4255 Organic vapour + particulate respirator FFA2P3 R D

3M™ 4279 Organic vapour / inorganic + acid gas / ammonia / particulate respirator FFABEK1P3 R D

3M™ 4277 Organic vapour / inorganic + acid gas / particulate respirator FFABE1P3 R D

### 3M<sup>™</sup> Accessories for 4000 Series



3M<sup>™</sup> 400 Overspray Guard

# 3M<sup>™</sup> Half Masks & Full Face Masks



### 3M<sup>™</sup> 3000 Series Reusable Half Masks

The new 3M 3000 Series Respirators is the perfect fit for a tight budget, securing high levels of working protection and comfort at a hardworking price. Compact and light, it moulds itself softly and securely to the contours of your face without blocking your view. You can quickly snap-on the relevant gas or particulate option and, with the benefit of 3M innovation and quality, keep both your breathing and your mind at ease.

### **Features and Benefits:**

### **User-friendly**

- + low profile design allows a wide field of vision
- + lightweight makes long period of wear bearable
- + soft, elastomeric face-fit secures a lasting comfort
- + available in two sizes (S/M and M/L)
- + unique, easy to don/doff strap system

### Versatile

- + snap-on options suitable for a wide range of chores
- + cartridge options for organic vapours/gas
- + filter options for a combination of organic vapours and particulates

### Great value

- + durable, designed to last without weighing you down
- + 3M quality at an affordable price
- + for optimal comfort, choose a respirator that fits well with the other PPE you need for the job

### **Filter Options**

### Option 1: For gas & vapour protection



### **Option 2:** For particulate protection



Option 3: For gas, vapour and particulate protection



3M<sup>™</sup> 3200 Half Mask EN 140:1998

> 3M<sup>™</sup> 3100 Half Mask – small/medium light (grey) 3M<sup>™</sup> 3200 Half Mask - medium/large (grey)

### 3M<sup>™</sup> 3000 Series Respirator Range



3M<sup>™</sup> 3200/3M<sup>™</sup> 3100 Half Mask



3M™ 3391 A1P2 R Gas and Vapour Cartridge with pre-attached particulate filter



3M™ 3351 A1 Gas and Vapour Cartridge



3M™ 3700 Particulate Filter Holder



Prefilter 3M™ 774 Retainer



3M™ 3728 P2 R Particulate Filter provides relief from nuisance lvele organic vapours.



### 3M<sup>™</sup> 6000 Series Reusable Half Masks

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

### **Features and Benefits:**

### **Head Harness**

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

### Lightweight Elastomeric Face Piece

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

### **Low-Profile Design**

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

#### **Filter Connection**

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

### Plus

- + A variety of spare parts available
- Available in three sizes distinguished by different colours

### **Compatible with**

- + Eyewear from 3M
- + Hearing Protection from 3M



3M<sup>™</sup> 6200 Half Mask (medium) EN140:1998 3M<sup>™</sup> 6100 – small (light grey) Half Mask

3M<sup>™</sup> 6200 - medium (grey) Half Mask

3M<sup>™</sup> 6300 - large (dark grey) Half Mask

#### New Ready-to-Use Respirator Packs – 3M 6000 Series reusable half masks



With 3M's new range of reusable Readyto-Use Respiratory Packs you have a safe solution for most common applications in industry, construction, agriculture and painting. Each pack contains a reusable half mask accompanied by a set of filters to protect against gases, vapours and particulates. You can choose between two different filter combinations of A1P2 R and A2P3 R to best meet your individual needs for protection.

### 3M<sup>™</sup> Half Masks & Full Face Masks



### 3M<sup>™</sup> 7500 Series Reusable Half Masks

3M 7500 series reusable half masks have set a new standard in comfort. The exhalation valve provides increased durability. Reduced breathing resistance helps to minimise heat build-up in the mask and increases your comfort.

Available in three sizes, all masks have the 3M<sup>™</sup> 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<sup>™</sup> Supplied-Air Systems.

### **Features and Benefits:**

### **Head Harness**

- + Balanced, secure fit
- + Reduced pressure and tension points

### **Facepeice**

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

#### 3M<sup>™</sup> Cool Flow<sup>™</sup> Exhalation Valve

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

### **Low-Profile Design**

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

### **Filter Connection**

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

### Plus

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

### **Compatible with**

- + Eyewear from 3M
- + Hearing Protection from 3M

### EN140:1998 3M<sup>™</sup> 7501 – small (grey blue) Half Mask 3M<sup>™</sup> 7502 – medium (light blue) Half Mask 3M<sup>™</sup> 7503 – large (dark blue) Half Mask

3M<sup>™</sup> 7503 Half Mask

### Other Reusable Half Masks by 3M



3M<sup>™</sup> 7002 Half Mask with rubber face seal and textured nose cup for reduced slippage and skin irritation. Available in medium (3M<sup>™</sup> 7002) and large size – (3M<sup>™</sup> 7003) Half Mask

### New Ready-to-Use Respirator Packs – 7500 Series



10 10 10 10

1070



### 3M<sup>™</sup> 6000 Series Reusable Full Face Masks

The 3M 6000 series full face masks are simple to handle and comfortable to the wearer. The new exhalation port provides increased durability and is easy to keep clean. Available in three sizes, all masks

have the 3M<sup>™</sup> 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.

3M<sup>™</sup> 6800 Full Face Mask (M) EN136:1998 (Class 1)

### **Features and Benefits:**

### **Full Face Piece**

- + Soft, non-allergenic elastomeric 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<sup>™</sup> Cool Flow<sup>™</sup> Exhalation Valve

- + Less exhalation resistance
- + Easier breathing
- + Less heat and sweat build-up
- + Eliminates 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

### Plus

- Available in three sizes distinguished by different colours:
  - 6700 small (light grey)
  - 6800 medium (grey)
  - 6900 large (dark grey)

### **Compatible with**

+ Hearing Protection from 3M



**Accessories for 3M Respirators** 



3M™ 105 Face Seal Wipe

31

### 3M<sup>™</sup> Half Masks & Full Face Masks



### 3M<sup>™</sup> 7907S Reusable Full Face Mask

The 3M 7907S full face mask offers durability and safety for demanding tasks that require face and respiratory protection. The 3M<sup>™</sup> Bayonet Connection System offers a broad range of twin lightweight filters to protect against gases, vapours and particulates depending on your individual needs. The 7907S full face mask by 3M can also be used with Supplied-Air Systems by 3M for your increased convenience and flexibility.

### **Features and Benefits:**

### **Six Strap Head Harness**

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

### **Full Face Lens**

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

### Facepiece

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

### **Filter Connection**

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

### Compatible with .

+ Hearing Protection from 3M

3M<sup>™</sup> 7907S Full Face Mask (Silicone) EN136 (Class 2)

### Accessories for 3M<sup>™</sup> Full Face Masks



3M<sup>™</sup> S-200 Regulator EN139:1994 NPF 50 with half mask NPF 200 with full face mask CE Marked

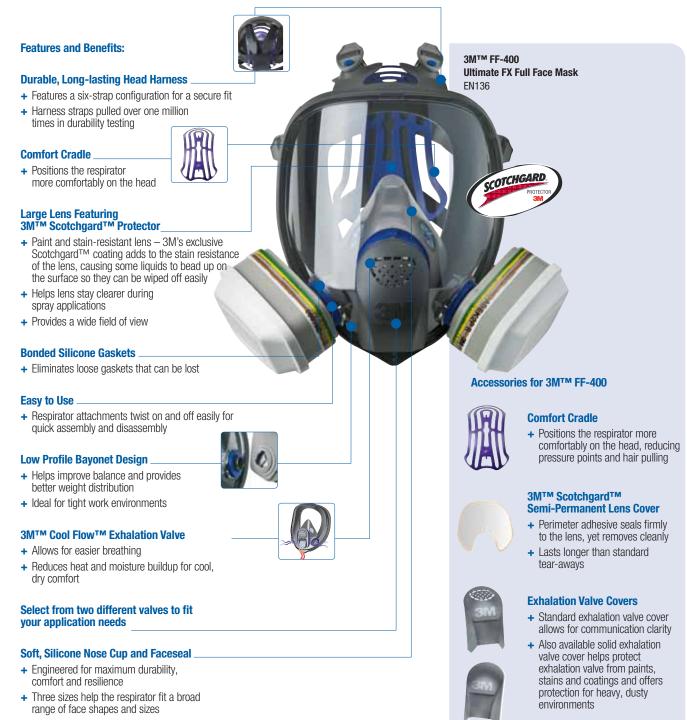


### 3M<sup>™</sup> FF-400 Ultimate FX Reusable Full Face Mask



3M's most rugged facepiece, designed to provide you flexibility in your X-treme working environments.

Engineered to deliver maximum comfort with a wide field of view, the FF-400 Ultimate FX respirator features a soft, silicone nose cup and a large lens that allows for superior peripheral vision. It's also the only respirator with 3M's unique Scotchgard<sup>™</sup> Protector, which helps the lens resist dirt, paint and stains, making it easier to clean. Plus, the 3M<sup>™</sup> Cool Flow<sup>™</sup> Exhalation Valve helps reduce heat and moisture buildup inside the facepiece.





# Powered and Supplied Air Respirators by 3M



### **Proven Solutions**

Providing clean breathing air is essential when working in areas subjected to extremely hazardous contaminants. Workers want respiratory protection equipment that is comfortable, lightweight and convenient. 3M delivers protection products that are high quality, high comfort, professional grade equipment, developed from years of research and development, customer feedback, and customer success.

### 3M<sup>™</sup> Versaflo<sup>™</sup> Respirator Systems

The new Versaflo range of respiratoty pretection represents an enormous effort by 3M to accomplish three major goals:

- simplify the equipment selection process
- increase system versatility
- improve user comfort every step of the way

### The Selection of Respiratory Protection Equipment follows a basic 3M four-step method:

- 1 Identify the Hazards dust, metal fume, gas, vapour etc.
- 2 Assess the Risk assess the hazard levels against safety standards and consider other protection skin, eye and body
- 3 Select the right Respirator disposable, reusable, half mask, full face, powered, supplied-air
- **4** Train in Fitting and Use to optimise respiratory protection



### 3M<sup>™</sup> Powered & Supplied Air Respirator



### **Powered & Supplied Air Respirators**

In addition to providing respiratory protection these systems offer high levels of comfort and ease of use which can enable improved productivity in the workplace.

3M is available to support the user in the correct selection, training and proper use of these products.

### Advantages of these Systems:

- + Combination of different protective functions, i.e. respiratory, head, face, eye and hearing protection
  - Comfortable respiratory protection
  - Integrated head protection
  - Reliable eye and face protection
  - Optional glare protection filters for welders
  - Optional hearing protection
- + No breathing resistance for easier working
- + Refreshing moving airflow
- + High wearer comfort can lead to:
  - higher wearer acceptance;
  - extended wearing period; and
  - higher productivity
- + Unlimited wearing time for increased productivity

### **Air Delivery Units**





### Powered Air Purifying Respirator (PAPR) Systems:

- + Purify the air coming in from the work environment
- Consist of a headtop, breathing tube, battery-powered turbo unit and one or more filters to remove particulate and gaseous contaminants out of the incoming air
- + Offer high mobility



### Supplied Air Respirator (SAR) Systems:

- + Utilise air from an external compressed air source that is independent of the hazardous environment
- + Consist of a headtop, breathing tube, belt-mounted regulator and compressed air supply tube
- Offer adjustable airflow to the headtop to suit personal preference
- + Can be used against contaminants with low warning properties

In both these systems, a slight positive pressure in the headtop makes breathing more comfortable and prevents contaminated air from entering the headtop.



### **Mobility Around the Workplace**

Regardless of whether a PAPR system or supplied air system both are safe, comfortable and industry proven. You should choose a PAPR solution wherever high mobility is required. Your workers can move around freely and be assigned to any particular area wherever they happen to be needed.

No matter which system you choose, you will always be getting a safe, comfortable and industry proven 3M PAPR or Supplied Air Respiratory solution.



#### **Powered Air**



3M<sup>™</sup> Jupiter<sup>™</sup> Powered Air Respirator



3M<sup>™</sup> Versaflo<sup>™</sup> **TR-300 Powered Air** Respirator



3M<sup>™</sup> Airstream<sup>™</sup> AS-300 Helmetmounted Powered Air Respirator

#### Supplied Air



3M<sup>™</sup> Versaflo<sup>™</sup> V-Series Regulator

Respirator

3M<sup>™</sup> Powerflow<sup>™</sup> XL

**Lithium Powered Alr** 





3M™ S-200™

Supplied Air System



**Supplied Air Visor** 



3M<sup>™</sup> Jupiter<sup>™</sup> and 3M<sup>™</sup> Versaflo<sup>™</sup> Powered Air Respirator Work requiring high mobility

3M<sup>™</sup> Versaflo<sup>™</sup> V-Series and S-200 Supplied Air Systems Work requiring limited mobility

# 3M<sup>™</sup> Powered & Supplied Air Respirator



## Four Steps to the Right Respirator

### Modular 3M<sup>™</sup> Versaflo<sup>™</sup> Respirator Systems

- Identify the Hazards dust, metal fume, gas, vapour etc.
- 2 Assess the Risk assess the hazard levels against safety standards and consider other protection skin and eye
- 3 Select the right Respirator Powered, Supplied-Air



### 3.1

**Choose your Air Delivery Unit** 

To handle the contaminant situation at your particular workplace, you have the choice between two powered air turbos and three supplied air regulators.

### **Individual Systems**

The respirator systems featured below can be used in a variety of workplace applications. They include the 3M<sup>™</sup> Airstream<sup>™</sup> Powered Air Respirators with integrated head, eye, face and respiratory protection and the 3M<sup>™</sup> S-200 Regulator, compatible with 3M<sup>™</sup> Half and Full Face Masks.

3M<sup>™</sup> Airstream<sup>™</sup> AS-300 Helmet-mounted Powered Air Respirator



3M<sup>™</sup> S-200 Supplied Air Respirator



3M<sup>™</sup> Powerflow<sup>™</sup> XL Lithium Powered Air Respirators



3M<sup>™</sup> Visionair<sup>™</sup> Supplied Air Visor



### **Starter Kits**

The modular 4 step selection process can be made even easier by choosing 3M's air delivery unit starter kits which include everything apart from your headtop.



#### **3.2** Choose your Headtop



From lightweight hoods to industrial helmets that provide not only respiratory protection, but also can provide eye and face protection, head protection, and hearing protection.

### 3.3



**Choose your Breathing Tube** 

The breathing tube reliably connects the headtop to the air delivery unit, ensuring a constant flow of breathing air. To meet the high respiratory performance requirements,  $3M^{TM}$  Versaflo<sup>TM</sup> Headtops connect to their air delivery units via the new  $3M^{TM}$  Versaflo<sup>TM</sup> BT-Series Breathing Tubes.

### 3.4

#### **Choose Accessories**

3M offers a comprehensive range of modular system accessories to make it easier to customise the system to suit individual needs. When using powered air turbos, users must also choose the right filters for the contaminant(s). For supplied air regulators an additional regulator panel is available..

Train in fitting and use – to optimise respiratory protection

### 3M<sup>™</sup> Versaflo<sup>™</sup> Powered Air Respirator



### 3M<sup>™</sup> Versaflo<sup>™</sup> TR-300 Powered Air Respirator

Versaflo

The new, lightweight 3M Versaflo TR-300 powered air turbo is the key to easy-to-use, versatile, respiratory protection systems for particulate environments. The turbo is significantly lighter and thinner than 3M's existing belt-mounted turbo units, with a slim profile designed for use in tight spaces

#### **Applications**

- + Metalworking
- + Woodworking
- + Welding
- + Agriculture

#### **Features and Benefits**

- + Slim, lightweight balanced design
- + Protection from particles

- 3M<sup>™</sup> Versaflo<sup>™</sup> TR-300 Powered Air Respirator EN12947 TH2/TH3 Protecting class\* Weight 1095 g (including high capacity
  - battery, standard belt and particle filter)

- + Controlled flow, at nominal 190 l/min
- + Intelligent power
- + Easy to adjust and maintain.
- + Outer surfaces are easy to clean
- + Audible and visual low airflow and low battery alarms
- + Battery charge indicator
- + Optional braces and backpack available
- + Battery charge indicator



3M<sup>™</sup> Versaflo<sup>™</sup> TR-302E Turbo Unit The 3M Versaflo TR-302E Turbo Unit comes with an airflow indicator only.

3M<sup>™</sup> Versaflo<sup>™</sup> TR-315E Starter Kit This 3M Versaflo TR-315E Starter Kit (photo) includes the TR-300 turbo unit, particulate filter, pre-filter, standard belt, high capacity battery pack, battery charger kit (not shown), self-adjusting breathing tube and airflow

 Please see the data of the headtop used with the unit for information on protection class ratings.

## 3M<sup>™</sup> Versaflo<sup>™</sup> Powered Air Respirator



### Accessories for 3M<sup>™</sup> Versaflo<sup>™</sup> TR-300 Respirator

Users can select a particulate filter that also reduces nuisance-level organic vapours.\* Alternatively, users may select a particulate filter that also provides protection against hydrogen fluoride with performance up to 10 x Threshold Limit Value (TLV) as well as offering nuisance-level acid gas performance.



- For welding and grinding applications, a spark arrestor reduces the risk that sparks and other hot materials will come in contact with the filter and motor.
- Three belt options include standard webbing; a coated, easy-clean model; and a highly-durable, spark-resistant, leather model for heavy-duty applications and environments with heat, sparks and hot particles. Braces and a backpack are also available.
- + Economy and High-Capacity battery
- + Single Charger and 4-Station Battery Charger kit.

\*Nuisance level" refers to concentrations below the occupational exposure limit (OEL). Regulatory submissions pending.

#### Accessories



#### Filter types:

Pre-filter Spark arrestor

Particle Particle + Nuisance level organic vapour Particle + HF Nuisance level acid gas filter



Batteries: Litium ion 5-6 hours Economy battery 10-2 hours High capacity battery





Belts: 1) Standard webbing

Battery chargers: Single charger 4-station charger kit

- 2) Coated, easy-clean
- 3) Heavy-duty leather

Back-pack

Braces







# 3M<sup>™</sup> Jupiter<sup>™</sup> Powered Air Respirator



### 3M<sup>™</sup> Jupiter<sup>™</sup> Powered Air Respirator

Once a suitable headtop has been selected, a suitable air source should be selected for your application. The 3M<sup>™</sup> Jupiter<sup>™</sup> Respirator is a comfortable, easy-to-use powered air purifying turbo unit that provides protection against solid particulates, gases or vapors, or against a combination of these depending on the types of filter cartridges used. An integrated acoustic and visual alarm indicates if airflow to the headtop is reduced or battery charge runs low. The 3M Jupiter Powered Air Respirator is also available with an optional Intrinsically Safe (IS) cover.

#### Applications

- + Metalworking
- Automotive Industry
- + Demolition and Stripping
- + Painting
- + Chemical and Pharmaceutical Industry
- + Agriculture
- + Woodworking



\* Please see the data of the headtop used with the unit for information on protection class ratings.

# 3M<sup>™</sup> Jupiter<sup>™</sup> Powered Air Respirator



### Accessories for 3M<sup>™</sup> Jupiter<sup>™</sup> Powered Air Respirator

A broad range of accessories is available to adapt the 3M<sup>™</sup> Jupiter<sup>™</sup> Powered Air Turbo to different work conditions – ranging from various filters to different battery packs to an Intrinsically Safe (IS) cover.



### 3M<sup>™</sup> Versaflo<sup>™</sup> V-Series Supplied Air Regulators



### 3M<sup>™</sup> Versaflo<sup>™</sup> V-500E Regulator

This regulator can be combined with all 3M<sup>™</sup> Versaflo<sup>™</sup> Headtops and ensures an individually adjustable, constantly controlled airflow. 3M Veraflo V-500E Regulator ensures an individually-adjustable, consistently-controlled airflow. The regulator requires a working pressure of 3.5-8 bar and is extremely quiet due to the integrated silencer (<65 dBA). An integrated warning whistle warns the user of low airflow into the headtop. The 3M<sup>™</sup> AirCare<sup>™</sup> Filtration Unit can be connected inline to clean the compressed air before it is fed to the regulator. The various components of the 3M<sup>™</sup> Versaflo<sup>™</sup> V-Series Supplied Air Regulators are connected using plug and socket hose couplings (Rectus 25, CEJN, 342' or Broomwade connectors available). An auxiliary port allows a spray gun or other air tool to be connected to the V-500E Regulator without causing variations in headtop airflow. An integrated warning whistle warns the user of low airflow into the headtop.

#### **Applications**

- + Chemical and pharmaceutical industry
- + Paintspraying
- + Metal finishing

 3M™ Versaflo™ V-500E Regulator

 Approval
 EN14594

 Protection
 class\*

 Weight
 550 g

#### **Features and Benefits**

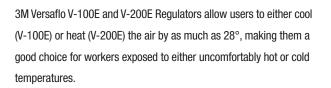
- + Integrated low airlfow warning whistle
- + QRS Breathing tube
- + Integrated silencer
- + Lockable Airflow adjustment knob
- + Removable, Integrated activated charcoal filter
- + Belt swivel mechanism
- Auxiliary connection for air tools (e.g. spray gun)
- + Supplied air connection
- + Easy to clean
- + Air flow 170-305 I/min



\* Please see the data of the headtop used with the unit for information on protection class ratings.

### 3M<sup>™</sup> Versaflo<sup>™</sup> V-Series Supplied Air Regulators

# 3M<sup>™</sup> Versaflo<sup>™</sup> V-100E Air Cooling and V-200E Air Heating Regulators



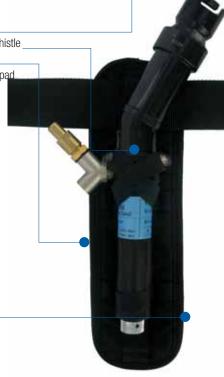
#### Applications

- + Heavy Industry
- + Foundries (high radiant heat)
- + Construction Industry (cold outdoor temperatures)
- + Manufacturing



#### **Features and Benefits**

- + Heating/cooling effect
- + Breathing tube
- + Integrated low-airflow warning whistle
- + Compressed air connection
- + Belt mounting with an insulating pad
- + Working pressure 4-8 bar
- + Air volume 170-500 L/min
- + Adjustable \_\_\_\_\_\_ temperature controller



**3M Versaflo V-100E Air Cooling Regulator** EN14594 Protection class\* Weight 605 g incl. belt and pad

#### 3M Versaflo V-200E Air Heating Regulator



Approval: EN14594 Protection class\* Weight: 499 g incl. belt and pad

\* Please see the data of the headtop used with the unit for information on protection class ratings.

# 3M<sup>™</sup> Versaflo<sup>™</sup> Headtops



### 3M<sup>™</sup> Versaflo<sup>™</sup> S-Series Headcovers and Hoods

Based on a computer modeling of a worldwide sampling of head sizes, new 3M<sup>™</sup> Versaflo<sup>™</sup> S-Series Suspensions, through their sizing and adjustment options, will comfortably fit more users than previous models. Their loose-fitting designs mean more comfort for the entire shift when compared to tight-fitting alternatives

#### **Applications**

- + Pharmaceutical Industry
- + Labs
- + Painting
- + Chemical Industry

#### **Features and Benefits**

- Meets highest respiratory class - EN 12941 TH3
- + Nominal Protection Factor 500
- + Eye and face protection to EN166 - liquid splash and low energy impact
- + Improved shape
- + Comfortable to wear for long periods
- + Excellent air flow
- + Improved visibility



3M™ Air Delivery Unit	Standards with S-Series Headcovers and Hoods*	NPF**
3M <sup>™</sup> Versaflo <sup>™</sup> TR-300	EN12941 TH3, EN166 2:F:3	500
3M <sup>™</sup> Jupiter <sup>™</sup>	EN12941 TH3, EN166 2:F:3	500
3M <sup>™</sup> Versaflo <sup>™</sup> V-500E/V- 200E/V-100E	EN14594 3A, EN166 2:F:3	200

\* The S-Series Headcovers and Hoods meet the lower strength (A)

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

\*\* 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<sup>™</sup> Versaflo<sup>™</sup> S-133 Headcover

General purpose, costeffective fabric. Fabric material: Polypropylene coated nonwoven polypropylene. Visor material: PETG.

#### 3M<sup>™</sup> Versaflo<sup>™</sup> S-333G Headcover Soft, quiet, more durable low-linting fabric.

Fabric material: Polyurethane coated knitted polyamide. Visor material: Coated polycarbonate. for increased chemical and scratch resistance.

#### 3M<sup>™</sup> Versaflo<sup>™</sup> S-433 Hood

Includes neck and shoulder coverage. Fabric material: Polypropylene coated nonwoven polypropylene. Visor material: PETG.

#### 3M<sup>™</sup> Versaflo<sup>™</sup> S-533 Hood

Neck and shoulder coverage with soft, lowlinting fabric that more readily drapes over user. Fabric material: Polyurethane coated knitted polyamide. Visor material: Coated polycarbonate for increased chemical and scratch resistance.



#### 3M<sup>™</sup> Versaflo<sup>™</sup> S-655 Hood

General purpose, with knitted inner collar that is shorter and thinner than previous models. Fabric material: Polypropylene coated non-woven polypropylene. Visor material: PETG.



#### 3M<sup>™</sup> Versaflo<sup>™</sup> S-657 Hood

Features a doubleshroud design for its respiratory seal.

Fabric material: Polypropylene coated non-woven polypropylene. Visor material: PETG.

#### 3M<sup>™</sup> Versaflo<sup>™</sup> S-757

**Painters Hood** Fabric specifically intended to help capture paint overspray. Fabric material: Polypropylene coated non-woven polypropylene. Visor material: PETG.

#### 3M<sup>™</sup> Versaflo<sup>™</sup> S-855E Hood Sealed seam hood for liquid chemical splash

Fabric material: Zytron® Visor material: Coated















### 3M<sup>™</sup> Versaflo<sup>™</sup> M-Series Headcovers and Hoods

The all-new 3M<sup>™</sup> Versaflo<sup>™</sup> M-Series Headtops feature lightweight, compact and well-balanced faceshields and helmets that offer protection from a range of respiratory, impact and splash hazards.

#### Applications

- + Smelting
- + Construction
- + Foundries
- + Grinding

#### **Features and Benefits**

- Integrated protection from multiple hazards (e.g. respiratory, impact, splash hazards). EN 12941 TH2.
   Nominal Protection Factor 50.
- + Modern, well balanced designs.
- + A deflector allows users to direct the airflow inside the headtop for increased control and comfort.
- + Visor design combines excellent peripheral and downward vision with good optical clarity.
- + Coated lenses provide chemical and scratch resistance
- + Spare parts and accessories are quick, easy and intuitive to replace.
- Offerings for hearing protection available separately





3M<sup>™</sup> Versaflo<sup>™</sup> M-100 Series Faceshields for respiratory, eye and face protection:

**M-106** features a general purpose faceseal for dusts, spraying and chemical processing. **Fabric material:** Polyurethane coated polyamide.

**M-107** features a flame resistant faceseal for applications with hot particles. **Fabric material:** flame resistant polyester.



3M<sup>™</sup> Versaflo<sup>™</sup> M-300 Series Helmets for respiratory eye, face and head protection:

**M-306** features a general purpose faceseal for construction, chemical applications and heavy industry. **Fabric material:** Polyurethane coated polyamide.

**M-307** features a flame resistant faceseal for applications with hot particles. **Fabric material:** flame resistant polyester



	3M <sup>™</sup>	3M™ Versaflo™ M-100 and M-300 Serie	es	3M <sup>™</sup> Versaflo <sup>™</sup> M-400 Series			
Air Delivery Unit		Standards	NPF***	Standards	NPF***		
	3M <sup>™</sup> Versaflo <sup>™</sup> TR-300	EN12941 TH2, EN166 1:B:3:9, EN397**	50	EN12941 TH2, EN166 1:B:3:9, EN397**	500		
	3M <sup>™</sup> Jupiter <sup>™</sup>	EN12941 TH2, EN166 1:B:3:9, EN397**	50	EN12941 TH2, EN166 1:B:3:9, EN397**	50		
	3M <sup>™</sup> Versaflo <sup>™</sup> V-500E/V-200E/V-100E	EN14594 2B*, EN166 1:B:3:9, EN397**	50	EN14594 3B*, EN166 1:B:3:9, EN397**	200		

\* The M-Series Faceshields and Helmets meet the higher strength (B) requirements of EN14594. They are approved for use with a range of compressed air supply tubes that meet both the lower and higher strength (A and B) requirements \*\* Versaflo M-300 and M-400 Series Helmets

\*\*\* 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<sup>™</sup> Welding Shields



For a more comprehensive guide to 3M welding please refer to the welding section

### 3M<sup>™</sup> HT-600 Series Welding Shields

The HT-600 Series Welding Shields by 3M not only offer respiratory protection but also face, eye and impact protection in metal working and fabrication environments. The various flip-up shield and filter mechanisms allow you to inspect your work whilst the large coverage area gives protection from radiation and sparks. The range also offers choice of filter shades including auto-darkening and fixed shade.

Thanks to the comfortable head harness and knitted faceseal, the welder can wear the welding visor for long periods of time. The airflow through the visor ensures reduced sweat build up and can make the welder more comfortable and efficient;

#### **Features and Benefits**

#### 3M<sup>™</sup> HT-639 Welding Shield\*

- + A well-balanced shield
- + Superb coverage
- + Respiratory, eye, face and impact protection
- Conventional or auto-darkening filters can be fitted
- Supplied with a 90 x110mm filter holder able to hold fixed shade or auto-darkening filters
- + Weight: 696g





 Easy-to-fit comfortable, \_\_\_\_\_ elasticated, knitted faceseal



- New comfortable \_\_\_\_\_ easy-adjust harness with double comfort band
- Harness/airduct in \_\_\_\_\_ one robust assembly

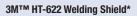


- + Super Coverage
- Liftable welding lenses, to allow clear view, while retaining respiratory protection
- New airduct system giving improved airflow to the face area

3M Air Delivery Unit	3M <sup>™</sup> HT-600 Series Shields	NPF**
3M <sup>™</sup> Versaflo <sup>™</sup> TR-300	EN12941 TH2, EN175	50
3M <sup>™</sup> Jupiter <sup>™</sup>	EN12941 TH2, EN175	50
3M <sup>™</sup> Versaflo <sup>™</sup> V-500E/V-200E/V-100E	EN14594 2B*, EN175	50

\* The 600 Series headtops meet the higher strength (B) requirements of EN14594. They are approved for use with a range of compressed air supply tubes that meet both the lower and higher strength (A and B) requirements.

\*\* 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. The protection factor is assigned by local authorities in each European country and can therefore be different for different countries.





A super-light shield for welders wanting to maximise the benefits of the Euromaski™ system. Wide range of filter shade combinations available. Headtop weight: 595g

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

Euromaski<sup>™</sup> is used with permission of Euromaski Oy, Finland.

#### 3M<sup>™</sup> HT-629 Welding Visor\*



The solution for those welders needing a welding shield with a clear, wide view visor beneath. The 90 x 110mm filter holder hinges down for easy access. Headtop weight: 794g.

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





### 3M<sup>™</sup> HT-700 Series Helmets

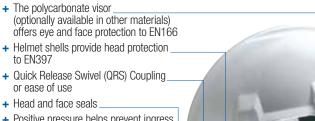
The 700 Series Helmets by 3M offer the user not only respiratory protection, but also EN166 approved eye and face protection as well as EN397 head protection. The helmet shells are optionally available in different colours. For especially hot work areas, the  $3M^{TM}$  HT-707 Helmet features a heat resistant shell and it is also available with an optional heat resistant cover. The  $3M^{TM}$  HT-748 and HT-749 Systems offer an additional glare protection filter is thus especially suitable as a welding protection solution.

The HT-748 and HT-749 Systems can be equipped with either a fixed shade filter or an Auto Darkening Filter in the standard format 90 x 110 mm /  $3^{1/4"}$  x  $4^{1/4"}$ .

#### Applications

All industrial areas that require eye, face, head and hearing protection e.g.

- Smelting
- + Construction
- + Foundries (grinding, polishing)
- + Welding



- + Positive pressure helps prevent ingress of contaminant into the headtop
- + Light, well balanced

**Features and Benefits** 



3M<sup>™</sup> HT-701\* Safety helmet, white

Weight: 715 g EN12941 TH2 (with 3M Jupiter<sup>™</sup>) prEN146 TH2 (with 3M Dustmaster<sup>™</sup>) EN1835 LDH2 (with 3M Flowstream<sup>™</sup>, Vortemp and Vortex regulators)

#### Other 3M<sup>™</sup> Series 700 Helmets



3M™ HT-702\* Safety helmet, blue Weight: 715 g



3M<sup>™</sup> HT-705\* Safety helmet, green Weight: 715 g



**3M™ HT-748 / HT-749\*** Weight: 900 g



**3M<sup>™</sup> HT-707\*** With additional radiant heat kit Weight: 850 g



3M<sup>™</sup> HT-707\* Safety helmet, white, heat resistant shell Weight: 715 g

As an alternative to the Athermal filter, the HT-748 / HT-749 can be equipped with the optional Auto Darkening Filter in the standard format 90 x 110 mm.

\* EN12941 TH2 (with 3M Jupiter™) prEN146 TH2 (with 3M Dustmaster™) EN1835 LDH2 (with 3M Flowstream™, Vortemp and Vortex regulators)

All 700 series Headtops shown can be combined with all 3M<sup>TM</sup> Powered Air and Supplied Air systems. When combined with the 3M<sup>TM</sup> Dustmaster<sup>TM</sup> and 3M<sup>TM</sup> Jupiter<sup>TM</sup> Powered Air Turbos, they achieve protection class TH2 and can be used to provide protection up to 50 times the relevant TLV (Threshold Limit Value). When combined with the 3M<sup>TM</sup> Flowstream<sup>TM</sup>, Vortemp and Vortex Regulators, they achieve protection class LDH2 and can be used to provide protection up to 50 times the relevant TLV.



## **3M<sup>™</sup> Versaflo<sup>™</sup> BT-Series Breathing Tubes**

A breathing tube connecting the air source with the headtop is required to ensure that clean air reaches the headtop reliably and with unrestricted airflow. The breathing tubes offered are compatible with all 3M<sup>™</sup> Versaflo<sup>™</sup> Headtops and Air Delivery Units You can choose either a lightweight polyurethane breathing tube or a robust rubber breathing tube. A special flame-resistant sleeve lengthens the life of the breathing tube and protects it from flying sparks.

3M<sup>™</sup> Versaflo<sup>™</sup> Breathing Tubes

3M<sup>™</sup> Versaflo<sup>™</sup> Headtops







3M<sup>™</sup> Versaflo<sup>™</sup> BT-20 S&L **Breathing Tube** Lightweight breathing tube that comes in two lengths and is easy to wipe down.

Material: Polyurethane. Length: 735 mm (S), 965 mm (L).



3M<sup>™</sup> Versaflo<sup>™</sup> BT-30 **Breathing Tube** Self-adjusting length for improved fit for all wearers and reduce risk of catching and snagging.

Material: Polyurethane. Length: 525 - 850 mm.



3M<sup>™</sup> Versaflo<sup>™</sup> BT-40 **Breathing Tube** High durability breathing tube.

Material: Neoprene. Length: 840 mm.



Accessories

BT-922: Disposable breathing tube cover.

BT-926: Flame resistant breathing tube cover

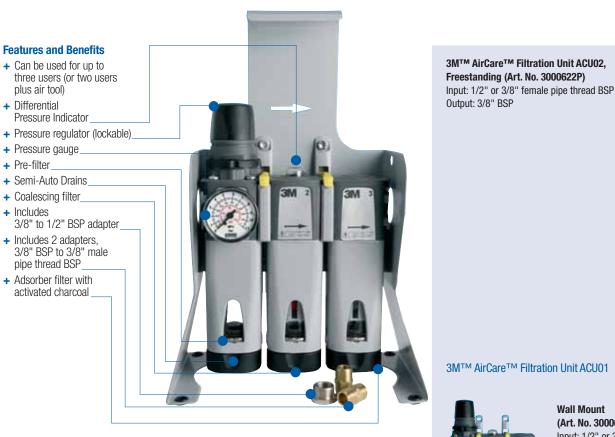


# 3M<sup>™</sup> Supplied Air Accessories



### 3M<sup>™</sup> AirCare<sup>™</sup> Filtration Unit

The 3M<sup>™</sup> AirCare<sup>™</sup> ACU01 / ACU02 Filtration Unit can be combined with all 3M<sup>™</sup> 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 odors from the facility-supplied compressed air.
- + The Filtration Unit is available as either a portable freestanding unit or wall-mounting unit.
- Output pressure can be adjusted with the integrated pressure regulator. The 3M<sup>™</sup> AirCare<sup>™</sup> Filtration Unit can be used with input pressures up to 10 bar.

Wall Mount (Art. No. 3000621 P) Input: 1/2" or 3/8" female pipe thread BSP

Output: 3/8" BSP



Wall mounted



### 3M<sup>™</sup> Compressed Air Supply Tubes and Couplings

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

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

# A MARIAN + 3/8" BSP of the hose + Flexibility of the hose + 3/8" BSP of the hose

7.5 m **Coiled Air Hose** Art. No. 3080040P

Air Hoses and Couplings



5 m Light duty hose Art. No. 3080035P



10 m Standard duty hose Art. No. 3080030P



10 m Standard duty antistatic, high temperature hose Art. No. 3080072P

30 m Standard duty hose Art. No. 3080031P





**Connection Set** for spray gun Art. No. 0230545P3



**Features and Benefits** 

2-Way Branch Set

Adapter 3/8" BSP

3/8" female pipe thread BSP, incl. 3/8" BSP adapters Art. No. 3120301P3



3-Way Branch Set 3/8" BSP. incl. 3/8" BSP adapters Art. No. 3120300P3



**Coupling Set** Rectus 25, 3/8" BSP Art. No. 5301282P3

**Coupling Plug, Rectus 25** for all Regulators, 1/4" BSP Art. No. 5301252P3

## 3M<sup>™</sup> Individual Systems

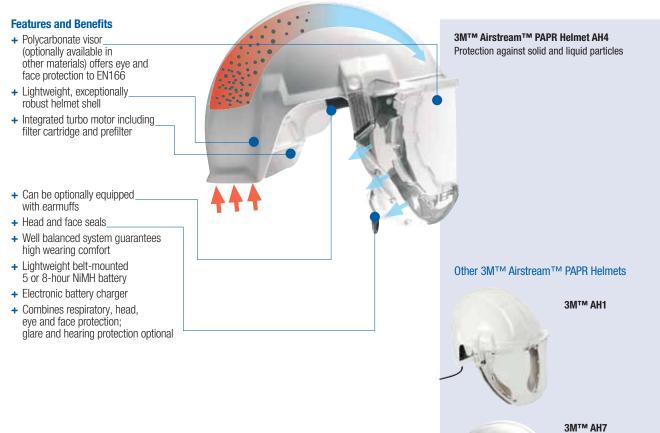


### 3M<sup>™</sup> Airstream<sup>™</sup> PAPR Helmet

The 3M<sup>™</sup> Airstream<sup>™</sup> Helmet is a headgear-mounted PAPR system where the blower motor and filter components are integrated into the helmet. The helmet is powered by a lightweight belt-mount battery. 3M<sup>™</sup> Airstream<sup>™</sup> PAPR Helmets have been very popular in industry for many years. They offer protection class THP2 and an NPF of 50 x TLV against particulate and fluid aerosols.

#### Applications

- + Metalworking Industry
- + Foundries
- + Welding
- + Construction Work





Warning: Respirator systems with open headtops only provide respiratory protection while the turbo motor is running. If the motor fails, you must leave the contaminated area immediately.

### 52



### 3M<sup>™</sup> Powerflow Plus<sup>™</sup> PAPR

The 3M<sup>™</sup> Powerflow Plus<sup>™</sup> PAPR consists of a 3M<sup>™</sup> Crusader Full Facepiece and facepiece-mounted turbo unit with P3 filter. 3M<sup>™</sup> Powerflow-Plus<sup>™</sup> PAPR system offers effective protection against potential health hazards when stripping or disposing of asbestos containing products. The combination of full facepiece, turbo unit and particulate filter complies with protection class TM 3 PSL (as per prEN 147) and can be used to provide protection up to 2000 times the relevant TLV.

#### **Features and Benefits**

- Lightweight full facepiece with wide viewing area (panorama vision)
- Facepiece made of EPDM rubber\_\_\_\_\_
  Equipped with one P3 filter for use \_\_\_\_\_
- against solid and liquid aerosols
- Compact turbo unit with DIN knuckle threads
- + Belt-mounted 8-hour system battery
- + Electronic battery charger
- + Smooth shape allows easy decontamination



#### Applications

+ Asbestos Stripping

#### 3M<sup>™</sup> Powerflow<sup>™</sup> Turbo Unit with Full Facepiece of Silicone

Approval Protection class APF prEN 147 (rev.) TM3 2000 x TLV (Turbo unit ON), 1000 x TLV (Turbo unit OFF)

#### Accessories

P3 Filter 8-hour battery Electronic battery charger

# 3M<sup>™</sup> Individual Systems



### 3M<sup>™</sup> S-200<sup>™</sup> Supplied Air System

The  $3M^{TM}$  S-200<sup>TM</sup> Supplied Air System is the most comfortable and versatile supplied air system for all  $3M^{TM}$  6000 and  $3M^{TM}$  7000 Series Half and Full Facepieces. The S-200 system by 3M can be used as a standard airline respirator or in dual-mode with filter back-up when air supply is disconnected.

Applications + Painting



 Stepsiling
 Supplied Air System

 Approval:
 EN139

 NPF:
 Half facepiece: 50 x TLV

 Full facepiece: 200 x TLV

 Working pressure: 3-8 bar

 Airflow to facepiece: 140-330 l/min

**Accessories** 

The  $3M^{TM}$  S-200<sup>TM</sup> System can be optionally combined with all 2000, 5000 and 6000 Series Filters by 3M.



Particulate Filter



Inserts 5000 Series



Gas/Vapor and Combination Filters 6000 Series

Warning: Respirator systems with open headtops only provide respiratory protection while the turbo motor is running. If the motor fails, you must leave the contaminated area immediately.

#### **Features and Benefits**

- + Breathing tube to air regulator
- + Half Facepiece 7500 Series
- Bayonet connector for breathing tube
- + S-200 Air Regulator
- + Pressure relief valve
- + Safety: High respiratory protection
- + Comfort: Swirling air flows in from the sides
- + Lightweight: Perfectly balanced system
- + Low maintenance

3M<sup>™</sup> S-200<sup>™</sup> Supplied Air System without additional filters





### 3M<sup>™</sup> Visionair<sup>™</sup> Supplied Air Visor System

The 3M<sup>™</sup> Visionair<sup>™</sup> supplied air visor system offers a stand alone solution for paint-spraying applications. Paint-spraying guns and other hand-held air-tools can be attached and powered by the supplied air spray gun hose.



### 3M<sup>™</sup> Individual Systems



### 3M<sup>™</sup> JS-470/JS-470G Series Chemical and Respiratory Protective Suits (CRPS)

The 3M<sup>™</sup> JS-470 Series of Type 4/5 Suits are designed to provide workers in pharmaceutical, hospital and veterinary environments with a high level of personal protection against a broad range of biological and particulate hazards.

These systems combine highly comfortable Type 4/5 suits with respiratory protection from the industry proven 3M<sup>™</sup> Jupiter<sup>™</sup> JP-ER-03 Powered Air Purifying Turbo.

#### Features, Advantages and Benefits

- + Type 4/5 Protective Suit with taped seams
- 3M's unique 'Head-Up-Display' gives the user constant feedback from the system in terms of visual and audible warnings and alarms
- Factory calibrated turbo to allow you to just get on with the job and not worry about air flow calibration
- + Approved to EN12941 TH3, with a Nominal Protection Factor (NPF) of 500.
- Additional testing to EN1073-1 gives an NPF of 2000\*
- The clear wide viewing visor provides excellent field of view and better focus on the task in \_\_\_\_\_\_ hand.
- + Comfortable, elasticated knitted neck seal.
- + Centre closing zip helps speed up the donning and doffing of the suit.
- 3M's air exhaust positioning means air must pass over the whole body to exit the suit through an active elastomeric exhaust valve. This provides a cool airstream which may improve comfort, reduces heat stress, allows for better focus on tasks and for longer wearing times.
- Fully encapsulated over boots so no sealing around boots required.

#### **Key Applications**

- + Manufacturing of Medicines
- + Laboratories
- + Infection Control
- Contact with infectious agents e.g. H1N1 influenza virus
- + Medical and Healthcare
- + Agriculture



 New comfort back harness allows for easier driving of vehicles and ensures ideal weight distribution of the turbo and filters.

 Integrated – Nitrile gloves welded to the suit so you don't have to spend time worrying about getting an effective seal (only on JS-470G).

- 3M<sup>™</sup> conductive strip can ground the wearer and the suit.
- JS-470 has no gloves and elasticated cuffs at the wrists.

\* Additional testing, to EN 1073-1:1998 demonstrated that a Total Inward Leakage (Respiratory Zone of less than 0.05% was achieved, relating to a Nominal Respiratory protection factor of 2000 for all suits. Inward leakage of whole suit design meets the requirement of the suit Type 5 Test, with Limn 82/90 =30% and Ls, 8/10



### 3M<sup>™</sup> JS-Series Chemical and Respiratory Protective Suits (CRPS)

### 3M<sup>™</sup> Filters and Accessories

Item	Description	Pack Qty
Suits		
JS-330 SUIT	Type 3 broad range chemical protection suit	1
JS-470 SUIT	Type 4/5 Lightweight suit, without integrated gloves	4
JS-470G SUIT	Type 4/5 Lightweight Suit with integrated gloves	4
Turbo		
JP-ER-03 Turbo Kit	Turbo, Backpack, Head-Up Filter Retainers Display and Breathing Tube	1
Batteries		
BAT-22	Single Use 4-Hr Battery	1
007-00-63P	Rechargeable 4-Hr Battery	1
007-00-64P	Rechargeable 8-Hr Battery	1
Filters		
450-00-25P2	Particulate P R Filters (Pairs)	12
453-00-25P2	A2P R Filters (Pairs)	6
453-09-25P2	A2BEK1P R Filters (Pairs)	6
453-16-25P2	K1P R Filters (Pairs)	6
456-18-25P2	ABE1P R Filters (Pairs)	6
JFR-85	ABEK2P R (Pairs)	6
Spares & Accessories		
BPK-01	Back Pack	1
008-00-42P3	Breathing Tube	3
003-00-58P	Intelligent Battery Charger	1
003-00-59P	Intelligent 10-Station Battery Charger	1

#### Disclaimer

There are uses, environments and chemicals for which these garments and/or fabrics are unsuitable. It is the responsibility of the user to review available data and verify that the garment and/or fabric is appropriate for the intended use and meets all specified government industry standards.





Please see Emergency Response Solutions for information about 3M<sup>™</sup> JS-330 Series Chemical and Respiratory Protective Suits (CRPS)"





### 3M<sup>™</sup> Speedglas<sup>™</sup> Welding Safety

The innovator of the 3M<sup>™</sup> Speedglas<sup>™</sup> Auto-Darkening Welding Filter completed his thesis in the shipyards of Sweden studying ways to protect welders' eyes and skin from harmful UV radiation. The studies were conducted more than 30 years ago and resulted in the first prototype of an auto-darkening welding filer, a combination of liquid crystal elements, polarizers and electronics.

Today Speedglas is the world's leading brand of protective equipment especially developed uniquely for welders' demands and it is a vital part of 3M's range of protective equipment.





# 3M<sup>™</sup> Speedglas<sup>™</sup> Welding Safety



### How ADF's work for welding



#### Before:

With the shield in the safe down position, the welder has a clear view through the welding filter. Both hands are free and the electrode can be precisely positioned.



**During:** 

Within 0.1 milliseconds of the arc strike, the filter has switched to the dark state.



#### After:

The filter automatically returns to the clear state after welding is complete, allowing for immediate and safe inspection of the weld pool, as well as preparation for the next weld.

### 3M<sup>™</sup> Speedglas<sup>™</sup> Welding Filter Guide

Optimized Suitable Not Recommended	9100XX	9100X	9100V	SL	9002X	9002V	9002D	100V	100S
Dark state	Shade 5, 8, 9-13 (variable)	Shade 5, 8, 9-13 (variable)	Shade 5, 8, 9-13 (variable)	Shade 8-12 (variable)	Shade 9-13 (variable)	Shade 9-13 (variable)	Shade 8/11 (dual)	Shade 8-12 (variable)	Shade 10 or 11 (single)
MMAW (Electrode)									
MIG/MAG									
TIG (>20A)									
TIG (1A-20A)									
Plasma (welding and cutting)									
Risk for hidden arc									
Tack welding									
Grinding									

This table is a quick guide to all our various models due to

detector function based solely on welding applications.

Before you select a model, ask yourself:

- How will I use my ADF?
- Do I occasionally change welding process/shade no?
- This is a long-term investment: A variable welding filter offers more flexible features for new working conditions.

**■** Speedglas<sup>™</sup>



### 3M<sup>™</sup> Speedglas<sup>™</sup> 9100 Welding Shield

Optimize your welding comfort, coverage and control. The new Speedglas 9100 Welding Shield features an all-new head suspension that profiles your unique head shape for a secure, stable fit.

More Coverage: we made the shield deeper and wider, providing greater coverage of ears, neck and sides of the head.

More Comfort: Professional welders marvel at the stability and balance of the shield – the result of its lower pivot point. The new head suspension also cradles your head better, giving a secure fit without the need to tighten the headband as much as you would on a conventional shield.

More control: Welders are delighted to see all the filter options: more versatility, greater optical control... and more user satisfaction.

#### **Features and Benefits:**

#### **Better Optics, Bigger Views**

- Three models to pick from, including the Speedglas 9100XX filter with a 73x107 mm viewing area – 30% larger than any other Speedglas welding filter
- Seven user selectable dark shades (5, 8 and 9 -13), including shades for gas welding, microplasma, and low-amp TIG
- The new, patented tack welding comfort mode uses a shade 5 light state to help reduce eye fatigue from constantly-changing light levels. You have the ability to "lock-in" any shade, light or dark

#### **Side-Windows:**

Exclusive shade 5 filters that widen your field of vision



#### **Suspension that Shapes to Your Head**

- Two crown straps gently saddle the top of the head for increased shield stability and better weight distribution
- The front of the headband also self-adjusts: pressure is evenly distributed to sets of twin-pads to fit the shape of your forehead
- The back portion of the headband is self-adjusting and swivels to fit different head shapes





#### reddot design award best of the best 2009



#### 2009

3M™ Speedglas™ 9100 Welding Shield Classification 1/1/1/2 Conforms to EN 175 level B and EN 379

#### 3M<sup>™</sup> Speedglas<sup>™</sup> 9100 Hard Hat Option



#### with the 3M<sup>™</sup> Peltor<sup>™</sup> G3001 Hard Hat The Peltor G3001 Hard Hat is produced in high quality UV-stabilised ABSplastic and it got top result for absorbing and distributing forces from fallen objects. This hat is one of the lightest hard hats on the market. Meets European standard EN 397 with approved extra requirements for low temperature (-30°C).

#### 3M<sup>™</sup> Speedglas<sup>™</sup> 9100 Welding Filter Options

3M<sup>™</sup> Speedglas<sup>™</sup> 9100XX Filter Viewing area: 73 x 107 mm

3M<sup>™</sup> Speedglas<sup>™</sup> 9100X Filter Viewing area: 54 x 107 mm

3M<sup>™</sup> Speedglas<sup>™</sup> 9100V Filter Viewing area: 45 x 93 mm



# I<sup>™</sup> Speedglas<sup>™</sup> Welding Safety



### 3M<sup>™</sup> Speedglas<sup>™</sup> 100 Welding Shield

The highly-affordable Speedglas 100 welding filter has excellent optical guality, reliable light-to-dark switching, and can be used with most arc welding processes, such as stick (MMA), MIG/MAG, and many TIG applications.

The easy-to-use Speedglas™ 100 welding shield is the ideal "first" auto-darkening shield for hobby welders, farmers, DIY types, and maintenance or construction workers who weld infrequently but can benefit from the ability to always clearly see with their welding protection in place. Apart from the black/silver shield there are a number of graphic shields available - all with specific identity.

#### **Features and Benefits:**

#### **Constant Protection**

+ UV/IR protection shade 12 permanent

#### Variable Shade Welding Filters (100V)

- + Three selectable sensitivity settings: a normal setting used for most types of welding, a setting for other welders working nearby and a setting for low-current or stable arc welding
- + Five user-selectable dark shades 8-12
- + Selectable delay settings (100-250 ms)
- + Switching time light-dark 0,1 ms

#### **Single Shade Welding Filters** (100S-10 and 100S-11)

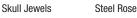
- + Single dark shade 10 or 11
- + Selectable delay settings (100S-10/100S-11: 150 ms / 200ms)
- + Switching time light-dark 0,1 ms

#### 3M<sup>™</sup> Speedglas<sup>™</sup> 100 Welding Shields – Graphic Edition













Still

Chrome

Trojan Warrior



Blaze



Mechanical Skull

Acess High

3M<sup>™</sup> Speedglas<sup>™</sup> 100 Welding Shield Classification 1/2/2 Conforms to EN 379

#### 3M<sup>™</sup> Speedglas<sup>™</sup> 100 Hard Hat Option



with the 3M<sup>™</sup> Peltor<sup>™</sup> G3001 Hard Hat The Peltor G3001 Hard Hat is produced in high quality UV-stabilised ABSplastic and it got top result for absorbing and distributing forces from fallen objects. This hat is one of the lightest hard hats on the market.

To fit with the Speedglas 100 welding shield the hard hat lining has been turned 180 degrees (and it is CE-approved in this position).

Meets European standard EN 397 with approved extra requirements for low temperature (-30°C).

#### 3M<sup>™</sup> Speedglas<sup>™</sup> 100 welding filter options

3M<sup>™</sup> Speedglas<sup>™</sup> 100V Welding Filter Viewing area: 44 x 93 mm

3M<sup>™</sup> Speedglas<sup>™</sup> 100S-10 Welding Filter Viewing area: 44 x 93 mm

3M<sup>™</sup> Speedglas<sup>™</sup> 100S-11 Welding Filter Viewing area: 44 x 93 mm





Speedglas"



### 3M<sup>™</sup> Speedglas<sup>™</sup> SL Welding Shield

Welders have asked for two things in personal protection: lighter weight and more comfort. Our challenges in designing an all-new shield were to significantly reduce its weight, while maintaining the performance and protection that welders worldwide have come to expect in every Speedglas product. The result of our efforts: a 360 gram autodarkening welding shield.

#### **Features and Benefits:**

#### The Shield: stronger, thinner

- + Strong lightweight material with excellent protection and coverage
- + Non-absorbent material, that retains its performance in high humidity
- Back-and-forth adjustments allow for better fit and safety

#### Auto-Darkening Welding Filter

- For most arc welding processes such as MMA, MIG/MAG, TIG and plasma welding
- + Auto ON and OFF
- + Viewing area 42 x 93 mm
- + Light state shade 3
- + Variable dark shade 8-12
- + Switching time light-dark 0,1 ms (+23°C)
- + Opening time dark-light (user-adjustable) 60-250 ms

#### The Headband: Fits better, feels cooler

- A pattern of holes for breathabillity and better conformity to the welder's head
- Accommodates smaller head sizes; its full range is from 50 cm to 64 cm



#### reddot design award winner 2007



3M™ Speedglas™ SL Welding Shield Classification 1 / 1 / 1. Conforms to EN 379, EN175 level F

3M<sup>™</sup> Speedglas<sup>™</sup> SL Hard Hat Option



with the 3M<sup>TM</sup> Peltor<sup>TM</sup> G3001 Hard Hat The Peltor G3001 Hard Hat is produced in high quality UV-stabilised ABSplastic and it got top result for absorbing and distributing forces from fallen objects. This hat is one of the lightest hard hats on the market.

To fit with the Speedglas 100 welding shield the hard hat lining has been turned 180 degrees (and it is CE-approved in this position).

Meets European standard EN 397 with approved extra requirements for low temperature (-30°C).



# 3M<sup>™</sup> Speedglas<sup>™</sup> Welding Safety



# 3M<sup>™</sup> Speedglas<sup>™</sup> 9000 Welding Shield with 3M<sup>™</sup> Adflo<sup>™</sup> Powered Air Respirator

Speedglas welding shields with the Adflo powered air respirator makes a light, compact, all-in-one system. The exclusive "stackable" configuration of the Adflo turbo unit means that the gas filter can be stacked onto the particle filter for additional protection from specific organic, inorganic and acidic vapours.

#### **Features and Benefits:**

#### An Adaptable System

- With the right type of filter, Adflo effectively protects against both particles and gases – all in one system. The filters can be replaced selectively: you don't need to change all filters at the same time
- + Prefilter: increases the service life of the particle filter
- + Particle filter: high efficiency particle filtration
- Gas filter: (A1B1E1 or A2) filters off organic and inorganic vapours
- Odour filter: removes unpleasant \_ smells (not needed when the gas filter is installed)

#### **Filter Indicator**

+ As soon as you turn on your\_\_\_\_\_ Adflo powered air respirator a display indicates the status of the particle filter

#### **Designed for Maximum Comfort**

- + Ergonomic leather belt (75 -150 cm)
- The Adflo respiratory system has no external batteries, no battery cables, and no sharp corners. Its slim profile is designed to go into tight spaces

#### Airflow

- The exclusive airflow pattern evenly distributes \_ filtered air throughout the entire breathing zone of the shield. The intelligent turbo unit keeps the airflow rate at a constant, preset level
- The soft, flexible face seal creates a positive pressure environment within the shield, keeping the surrounding pollutants at bay
- + For hot humid jobs the user can increase the airflow from 170 I/min to 200 I/min

3M<sup>™</sup> Adflo<sup>™</sup> Powered Air Respirator Nominal protection factor 50. Conforms to EN 12 941 (TH 2)

Other Adflo™ Powered Air Respirator products







3M<sup>™</sup> Speedglas<sup>™</sup> 9000 shield with Adflo PAPR Welding shield with autodarkening welding filter with safety helmet option

#### 3M™ Speedglas™ FlexView with Adflo PAPR Welding shield with autodarkening welding filter

darkening welding filter and a 120 x 90 mm clear visor for weld prep. Available in safety helmet option

#### Protective visor

with 3M<sup>TM</sup> Adflo<sup>TM</sup> PAPR Clear visor in polycarbonate or acetate. Shade 5 visor in polycarbonate

🗖 Speedglas"



### 3M<sup>™</sup> Speedglas<sup>™</sup> 9000 Welding Shield with 3M<sup>™</sup> Fresh-air C Compressed Air Respirator

For highly-contaminated welding environments, you need the 3M Fresh-air C compressed air respiratory system with a Speedglas welding shield or a visor. The belt-mounted regulator connects to an approved air hose with a quick release connector system. The airline supply must be air of breathable quality meeting the requirement of EN12021.

#### **Features and Benefits:**

#### **Adjustable Air Flow**

- + The lightweight, belt mounted regulator allows the user to adjust the airflow from 160 to 300 litres per minute, making Fresh-air C ideal for hot and strenuous work
- + Air pressure 4-10 bar
- + The exclusive airflow pattern evenly distributes filtered air throughout the entire breathing zone of the shield
- + The soft, flexible face seal creates a positive pressure environment within the shield, keeping the surrounding pollutants at bay

#### **Comfort Belt**

+ Polypropylene 78 -150 cm

#### **Filtration System**

- + The airline supply must be air of breathable quality meeting the requirement of EN12021
- + Oil mist or water vapour in the airline or non-toxic unpleasant odours may be removed with an air cleaning station, such as the 3M<sup>™</sup> Aircare<sup>™</sup> 500GR filtration systems

3M<sup>™</sup> Fresh-air C Compressed Air Respirator Nominal protection factor 200. Conforms to EN 270

#### **Other Fresh-air C Compressed Air Respirator products**





#### 3M<sup>™</sup> Speedglas<sup>™</sup> FlexView with Fresh-air C Welding shield with auto-

darkening welding filter and a 120 x 90 mm clear visor for weld prep. Available in safety helmet option

Protective visor with 3M<sup>™</sup> Fresh-air C Clear visor in polycarbonate or acetate. Shade 5 visor in poly-carbonate









### **Hearing Protection by 3M**

Service beyond the product, solutions beyond the obvious, understanding beyond the function and knowledge beyond safety. You can buy 3M confident in the knowledge that our products will do the job and you can also be rest assured that our product range is backed by first class support materials and specialist advice, so you'll always know where to turn.

Hearing protection must be right for you and your situation. For safety, productivity and comfort, it must reduce noise by the right amount, not too little and not too much. 3M can provide solutions for different individuals and applications, with products ranging from disposable ear plugs to high-tech electronic ear muffs.

Hearing Conservation by 3M is now expanding with new solutions and concepts like  $3M^{TM}$  Optime<sup>TM</sup>) Alert System,  $3M^{TM}$  E-A-Rfit<sup>TM</sup> validation system or the easy-to-use 3M Noise Indicator.









### **Noise Indicator**



E-A-Rfit

3M has introduced a new personal noise indicator solution that indicates thoroughly when you reach the 85 dB (A) threshold.

A new personal information tool dedicated to raise noise awareness with employees. This can also be a perfect solution for training and motivational purposes.

### E-A-Rfit<sup>™</sup> Validation System

Stop guessing what protection levels your Workers are really getting from their earplugs Start knowing each worker's personal protection level and Validate that they are getting the protection they need.

Ear canal shapes are different.

Fitting methods are different.

That means protection levels are different.

So who's getting what protection? Is it enough?

- · Validate personalised protection levels for each worker
- $\cdot$  Quick, easy and affordable testing process
- $\cdot$  Compatible with a variety of E-A-R^{\mbox{\scriptsize TM}} hearing protector

### Test Compatible With A Variety of E-A-R<sup>™</sup> Hearing Protectors.

Protection levels can be validated with many different E-A-R<sup>™</sup> hearing protectors. This selection includes specially-probed versions of foam and premoulded earplugs.



### Optime<sup>™</sup> Alert System

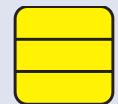
Our system uses a simple, logically coloured classification to make the selection process easy. Firstly find out what your noise level is, then look at the icons below and establish which noise band (RNR) your noise level falls into. Take note of the icon and choose from the wide range of products featuring the correct icon. 3M has also developed a simple sound level indicator that complements the Optime Alert System by establishing which colour code you need to follow.



\*RNR = Recommended Noise Rating



RNR\* < 85dB(A) You do not have to wear hearing protection, but make it available to your workers.



83 dB(A) - 93 dB(A) You must assume you are above the permitted exposure level, hearing protection is compulsory.



87 dB(A) - 98 dB(A) You are above the permitted exposure level hearing protection is compulsory. Ideal for high frequency noise.



94dB(A) - 105dB(A) You are above the permitted exposure level hearing protection is compulsory. Ideal for high and medium frequency noise.



95 dB(A) - 110 dB(A) fou are above the permitted exposure level, hearing protection is compulsory. Ideal for all frequencies.



### **Optime<sup>™</sup> Alert System by Product**



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

Ultrafit 14 Earplugs - SNR 14dB E-A-Rflex 14 Earplugs - SNR 14dB



#### YELLOW OPTIME<sup>™</sup> ALERT SYSTEM 83 dB(A) - 93 dB(A)

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

and protection

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

E-A-Rsoft 21 Earplugs - SNR 21dB Ultrafit 20 Earplugs - SNR 20dB ClearE-A-R 20 Earplugs - SNR 20dB Tracer 20 Earplugs - SNR 20dB Ultratech Earplugs - SNR 21dB 1281/1291 Earplugs - SNR 21dB E-A-Rflex 20 Earplugs - SNR 20dB E-A-Rband Earplugs - SNR 21dB



#### RED 1 OPTIME<sup>™</sup> ALERT SYSTEM 87 dB(A) - 98 dB(A) You are above the permitted exposure

You are above the permitted exposure level, hearing protection is compulsory. Ideal for high frequency noise. Classic Earplugs- SNR 28dB Express Earplugs- SNR 28dB 1261/1271 Earplugs - SNR 25dB E-A-Rcaps Earplugs - SNR 23dB Flexicap Earplugs - SNR 23dB Swerve Earplugs - SNR 24dB 1310 Earplugs - SNR 26dB Reflex Earplugs - SNR 26dB Ultra 9000 Earmuffs - SNR 22dB Model 5000 Earmuffs - SNR 27dB Optime I Earmuff - SNR 26/27/28dB (depending on the version) Bulls'eye I Earmuff - SNR 27dB H 31 Earmuff - SNR 27/28 dB (depending on the version)









#### RED 2 OPTIME™ ALERT SYSTEM

**94dB(A) - 105dB(A)** You are above the permitted exposure level hearing protection is compulsory. Ideal for high and medium frequency noise. Classic Corded Earplugs - SNR 29dB Pro-Seals Earplugs - SNR 29dB Torque Earplugs - SNR 32dB Tri-Flange Earplugs - SNR 29dB Tracers Earplugs - SNR 32dB Ultrafit Earplugs - SNR 32dB Optime II Earmuff - SNR 30/31dB (depending on the version) PTL Earmuff - SNR 29/31dB Depending On The Version Bulls'eye II Earmuff - SNR 31dB





#### RED 3 OPTIME™ ALERT SYSTEM

**95 dB(A) - 110 dB(A)** You are above the permitted exposure level, hearing protection is compulsory. Ideal for all frequencies.

PLEASE NOTE: At levels above 95dB(A) you will need an accurate noise assesment to correctly select the product. Green and Yellow marked products are not suitable for use in low frequency noise. Classic Soft Earplugs - SNR 36dB Superfit 33 Earplugs - SNR 36dB 1120/1130 Earplugs - SNR 36dB E-A-Rsoft Neons Earplugs - SNR 36dB E-A-Rsoft Blasts Earplugs - SNR 36dB E-A-Rsoft Metal Detectable Earplugs - SNR 36dB Solar Earplugs - SNR 36dB 1100/1110 Earplugs - SNR 37dB E-A-Rsoft Fx Earplugs - SNR 37dB E-A-Rsoft Fx Earplugs - SNR 35dB No-Touch Earplugs - SNR 35dB Push-Ins Earplugs - SNR 35dB Ultrafit X Earplugs - SNR 35dB Optime III Earmuff - SNR 34/35 dB (depending on the version) Bulls'eye III Earmuff - SNR 35dD



### BM<sup>™</sup> Passive Hearing



### **Roll Down PU Foam Earplugs**

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

#### **Features and Benefits:**

#### Comfortable

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

#### Convenient

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

#### Effective

+ High SNR of 37dB

#### **Compatible with**

+ Designed to be compatible with other PPE

#### 1100/1110

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

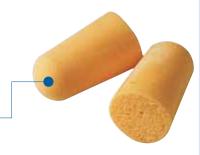
SNR=37dB H=37dB. M=34dB. L=31dB

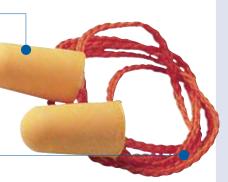
#### 3M™ 1100/1120 Dispenser

3M<sup>™</sup> 1100B Dispenser



Now 3M One-Touch dispenser also available to dispense 3M 1100 and 1120 ear plugs.





E-A-R<sup>™</sup> One-Touch<sup>™</sup> Dispenser

EAR

#### 3M<sup>™</sup> 1100/1110 Disposable Earplugs Available corded, uncorded and with dispenser

#### Other 3M<sup>™</sup> Disposable Earplugs

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



3M<sup>™</sup> Solar<sup>™</sup> plugs Colourful Earplugs Available corded, uncorded and with dispenser SNR: 36dB



E-A-Rsoft<sup>™</sup> Yellow Neons and Blasts Earplugs The E-A-R<sup>™</sup> standard PU earplugs Available corded (Yellow Neons), uncorded and with dispenser. Compatible with E-A-Rfit<sup>™</sup> validation system

SNR: 36dB



E-A-Rsoft<sup>™</sup> 21 Earplugs The low attenuation disposable earplugs Only available uncorded. SNR: 21dB



E-A-Rsoft™ FX Earplugs The highest attenuation Available uncorded. SNR: 39dB



E-A-Rsoft<sup>™</sup> Metal Detectable Earplugs The traceable disposable earplugs with cord. Compatible with E-A-Rfit<sup>™</sup> validation system SNR: 36dB





### **E-A-R<sup>™</sup> Classic<sup>™</sup> Earplugs**

Classic earplugs are made from a soft energy absorbing polymer foam which provides excellent hearing protection and all day comfort. The famous Classic earplugs are roll down plugs and are available in multiple options to accomodate different wearer needs.

#### **Features and Benefits:**

#### Comfortable

- Soft energy absorbing foam offers a low equilibrium pressure \_\_\_\_\_
- Absorption-resistant, helping to reduce moving and shifting problems when using in moist conditions\_\_\_\_\_\_
- + Design to fit and protect without irritation

#### Effective

+ Exposed cell surface texture resists movement and helps maintaining an effective seal

#### Convenient

- + Packed in a handy and resealable Pillowpack
- + Compatible with E-A-Rfit<sup>™</sup> validation system to check Personal Attenuation Ratings

#### **Compatible with**

+ Designed to be compatible with other PPE

#### **Classic Earplugs**

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	22.3	23.3	24.6	26.9	27.4	34.1	41.6	40.4
Standard Deviation (dB)	5.4	5.3	3.6	5.4	4.8	3.1	3.5	6.4
Assumed Protection (dB)	16.9	18.1	20.9	31.5	22.6	30.9	38.1	34.0

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

E-A-R<sup>™</sup> One-Touch<sup>™</sup> Dispenser



E-A-R<sup>™</sup> Classic<sup>™</sup> Earplugs Available corded, uncorded and with dispenser SNR: 28dB

#### Other E-A-R™ Classic Products

#### E-A-R<sup>™</sup> Classic<sup>™</sup> Soft Earplugs

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



E-A-R<sup>™</sup> Classic<sup>™</sup> Small Earplugs Reduced diameter for smaller ear canals Only available uncorded SNR: 28dB



E-A-R<sup>™</sup> Superfit<sup>™</sup> 33/36 Earplugs With exclusive fitting ring Available uncorded and with dispenser (only Superfit<sup>™</sup> 33) SNR: 33dB/36dB



### 3M<sup>™</sup> Passive Protection



### **Pod Earplugs**

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

#### **Features and Benefits:**

#### Comfortable

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

#### Convenient

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

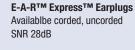
#### **Compatible with**

+ Designed to be compatible with other PPE

#### Express™

	Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
	Mean Attenuation (dB)	27.8	26.0	24.9	25.2	29.4	34.9	37.0	35.9
	Standard Deviation (dB)	5.4	4.5	3.3	5.0	4.2	4.1	5.2	3.7
	Assumed Protection (dB)	22.4	21.5	21.5	20.2	25.2	30.8	31.8	32.2
	SND-284B H-204B M-244B I -224B								

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



#### **Other Pod Plugs**

E-A-R™ Pro Seals™ Earplugs The pod earplugs with flexible stem Available corded SNR: 29dB

#### 3M<sup>™</sup> Torque<sup>™</sup> Earplugs

The tough pod plugs Available corded SNR: 32dB

3M<sup>™</sup> No-Touch<sup>™</sup> Earplugs The colourful pod earplugs Available corded SNR: 35dB



#### E-A-R<sup>™</sup> Push-Ins<sup>™</sup> Earplugs

The disposable pod ear plugs with high attenuation Available corded and uncorded. Compatible with E-A-Rfit<sup>™</sup> validation system SNR: 38dB





### **Pre Moulded Earplugs**

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

#### **Features and Benefits:**

#### Comfortable

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

#### Effective

+ High attenuation (SNR: 32dB)

#### Convenient

- + Available with a cord to prevent loss
- + Washable and reusable
- + Compatible with E-A-Rfit<sup>™</sup> 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

#### ULTRAFIT™

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

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











**E-A-R™ Ultrafit™ Earplugs** SNR 32dB

#### Other pre-moulded ear plugs

E-A-R<sup>™</sup> Ultrafit<sup>™</sup> 14/20 Earplugs The low attenuation E-A-R<sup>™</sup> Ultrafit<sup>™</sup> versions SNR: 14/20dB



ClearE-A-R 20<sup>™</sup> Earplugs The "nearly" invisible earplugs SNR: 20dB



#### E-A-R™ UltraTech™ Earplugs

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

3M<sup>™</sup> 1291 Earplugs The softest pre-moulded earplugs Available corded SNR: 21dB

3M<sup>™</sup> 1261/1271 Earplugs

The pre-moulded earplug with convenient storage case Available corded and uncorded

SNR: 25dB

6

E-A-R<sup>™</sup> Tracers<sup>™</sup> and Tracers<sup>™</sup> 20 Earplugs Metal detectable version SNR: 32dB (20dB for Tracers<sup>™</sup> 20)



### 3M<sup>™</sup> Passive Hearing



### **Banded Earplugs**

Banded hearing protectors are easy to use, convenient and extremely comfortable. They are quick to put on and off and to store around the neck when not required, making them ideal for intermittent use. Banded hearing protectors offer simplicity to help ensure that your workers are receiving the right level of protection. Most models are available with replacement pods making them a more cost-effective option.

#### **Features and Benefits:**

#### Comfortable

- + Extremely light
- + Very low pressure into the ear
- + Pod plugs gently slides into the ear with no deep insertion

#### Convenient

- + Easy to use
- + Ideal for people moving in and out
- + Replacement pods available

#### **Compatible with**

+ Designed to be compatible with other PPE

#### E-A-RCAPS™

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	21.0	20.0	19.8	19.1	23.2	33.4	41.0	40.7
Standard Deviation (dB)	4.1	4.4	4.2	4.3	3.7	4.5	2.9	5.4
Assumed Protection (dB)	16.9	15.8	15.5	14.8	19.5	29.0	38.1	35.2

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

3M<sup>™</sup> 1310 Earplugs The high flexibility band Replacement pods available SNR : 26dB



#### E-A-R<sup>™</sup> Reflex<sup>™</sup> Earplugs The multi-position banded earplugs with conical tips Replacement pods available SNR : 26dB



#### **Other banded earplugs**

E-A-Rflex<sup>™</sup> 14/20 Earplugs The low attenuation banded earplugs SNR: 14dB/20dB

E-A-Rband™ Earplugs The ergonomic banded earplugs Replacement pods available SNR: 21dB

E-A-R<sup>™</sup> Caboflex<sup>™</sup> Earplugs The banded earplugs with durable conical shaped insert Replacement pods available SNR: 21dB

E-A-R™ Flexicap™ Earplugs

The multi-position banded earplugs Replacement pods available SNR: 21dB

**3M<sup>™</sup> Pulsar<sup>™</sup> Earplugs** Design and ergonomy SNR : 23dB



E-A-R<sup>™</sup> Swerve<sup>™</sup> Earplugs The high-end banded pear plugs with adjustable band Replacement pods available. SNR : 26dB





### **Peltor<sup>™</sup> Optime<sup>™</sup> I Earmuffs**

Peltor<sup>™</sup> Optime<sup>™</sup> I Earmuffs offer versatile and lightweight protection with increased wearer comfort. The low profile design coupled with generous space inside the cups helps improve compatibility with other safety equipment and maximizes wearer comfort. Peltor<sup>™</sup> Optime<sup>™</sup> I is ideal choice for intermittent and prolonged usage. The wide, comfortable sealing rings are filled with a unique combination of fluid and foam, which gives optimum sealing and low contact pressure at the same time. It is ideal for use in many work environments with moderate industrial noise, such as light engineering, automotive industry, sheet-metal working as well as outdoor leisure or hobby activities such as lawn mowing and woodworking, for example.

#### **Features and Benefits:**

#### Comfortable

- Extremely low profile and light-weight design (180g) that helps improve compatibility with other safety equipment
- Generous space inside the cup to help improving comfort
- Soft and wide sealing rings filled with a unique combination of foam and liquid to offer optimum sealing and low pressure \_\_\_\_\_\_

#### Peltor™ Optime™ I Headband SNR: 27dB

#### **Accessories**

Hygiene kits are available for each earmuff version Hygeinic paper pads are available; Peltor Clean in two versions (HY100A - 100 pairs on a roll in a dispenser, HY100A-01 - 20 packages x 5 pair in a dispenser). Same version for all ear muff models.

Other Peltor™ Optime™ I Ear Muffs

- EffectiveModerate attenuation despite lightness and low profile design: 27dB SNR
- Unique band design, stainless steel wire for constant pressure over long periods of use \_\_\_\_\_

#### Versatile

 Available in several versions to help fit almost any situation: fixed and foldable headband, neckband and helmet mounted versions. All versions are available in high visibility colours



Peltor™ Optime™ I Helmet attachment Various versions for use with different safety helmets SNR: 26dB



Peltor<sup>™</sup> Optime<sup>™</sup> I Neckband No headband for a complete compatibility with other head worn PPE equipment SNR: 28dB



Peltor™ Optime™ I Foldable Headband Easy-to-store solution SNR: 28dB



Peltor<sup>TM</sup> Optime<sup>TM</sup> I Hi-Viz For workers in need of extra visibility, for example road workers and ground handling staff at airports. Available in all versions. SNR: 28dB

### 3M<sup>™</sup> Passive Hearing



### Peltor<sup>™</sup> Optime<sup>™</sup> II Earmuffs

The Peltor<sup>™</sup> Optime<sup>™</sup> II has been developed for demanding noisy environments and is effective in reducing even extremely low frequency sound. The sealing rings are filled with a unique combination of liquid and foam. The result is an optimum seal with low contact pressure, which provides agreeable comfort even during long periods of use. The sealing rings have ventilation channels and are covered with soft, patterned, hygienic foil. Optime<sup>™</sup> II earmuffs are a suitable choice for typical environments with substantial industrial noise or construction machinery, airports and agricultural work. The product is also available in a di-electric version without visible metal parts and in Hi-Viz green for workers who need hearing protection and to be extra visible – on road construction sites, airports or other high-risk workplaces.

#### **Features and Benefits:**

#### Comfortable

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

#### Effective

- Moderate 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 to help fit almost any situation: fixed and foldable headband, neckband and helmet mounted versions. All versions are available in high visibility colours



Peltor<sup>™</sup> Optime<sup>™</sup> II Headband SNR: 31dB

#### Accessories

Hygiene kits are available for each earmuff version

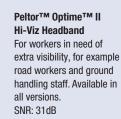
Hygeinic paper pads are available; Peltor Clean in two versions (HY100A - 100 pairs on a roll in a dispenser, HY100A-01 - 20 packages x 5 pair in a dispenser). Same version for all ear muff models Other Peltor™ Optime™ II Ear Muffs



Peltor™ Optime™ II Neckband No headband for a complete compatibility with other head worn PPE equipment. SNR: 31dB



Peltor™ Optime™ II Foldable Headband Easy-to-store solution SNR : 31dB



Peltor<sup>™</sup> Optime<sup>™</sup> II Helmet attachment Various versions for different safety helmets SNR: 30dB



#### Peltor™ Optime™ Push To Listen (PTL)

Optime™ Earmuff with a manual listening function. Just push the button and you reduce attenuation to listen. SNR: 31dB Also available in Hi-Viz and

listen. SNR: 31dB Also available in Hi-Viz and Helmet mounted version (SNR: 29dB) Peltor™ Optime™ II Di-electric A version with no visible metal parts. Available in all versions.





### **Peltor<sup>™</sup> Optime<sup>™</sup> III Earmuffs**

The Peltor<sup>™</sup> Optime<sup>™</sup> III is a high performance hearing protector that has been specifically developed for use in extremely noisy environments. The protection is based on a technology with a double casing minimising resonance in the holder casing resulting in maximum high-frequency attenuation. An acoustic connection between the inner volume and the volume between the casings provides maximum low-frequency attenuation. The sealing rings are broad and filled with soft plastic foam for best fit and low contact pressure. The Peltor<sup>™</sup> Optime<sup>™</sup> III earmuffs stand for effective protection and highest comfort for the wearer. The product is also available in Hi-Viz green for workers who need hearing protection and to be extra visible – on road construction sites, airports or other high-risk workplaces.

#### **Features and Benefits:**

#### Comfortable

- + Generous space inside the cup to help the ears breathe thus improving comfort
- + Broad sealing rings
- Sealing rings filled with soft plastic foam for the best fit and low contact pressure

#### Peltor™ Optime™ III Headband SNR: 35dB

#### Accessories

Hygiene kits are available for each earmuff version Hygeinic paper pads are available; Peltor Clean in two versions (HY100A - 100 pairs on a roll in a dispenser, HY100A-01 - 20 packages x 5 pair in a dispenser). Same version for all ear muff models.

Other Peltor<sup>™</sup> Optime<sup>™</sup> III Ear Muffs

#### Effective

- + Very high attenuation: SNR of 35dB
- + Unique band design, stainless steel wire for constant pressure over long periods of use
- Double casing that minimises resonance cup casing resulting in maximum high-frequency attenuation

#### Versatile

 Available in several versions to help fit almost any situation: fixed and foldable headband, neckband and helmet mounted versions. All versions are available in high visibility colours



Peltor™ Optime™ III Helmet attachment Various versions for different safety helmets. SNR: 34dB



#### Peltor™ Optime™ III Hi-Viz Headband

Peltor™ Optime™ III

worn PPE equipment

No headband for a complete

compatibility with other head

Neckband

SNR: 35dB

For workers in need of extra visibility, for example road workers and ground handling staff at airports. Available in all versions. SNR: 35dB



### **Applications**



Military / Police



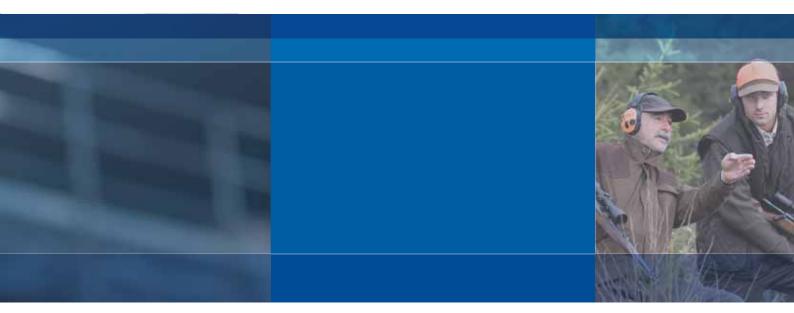
Oil & Gas



Motorsport



**Manufacturing Industry** 



#### 3M<sup>™</sup> Peltor<sup>™</sup> Hearing Communication Solutions

Peltor is a world leader in the field of professional communication equipment. By focusing on function and design, we create advanced,

comfortable safety and communication solutions that are attractive to use.

Our customers are professionals in industries such as oil & gas, military & police, motorsport, manufacturing, forestry, construction, airports and hunting & shooting.



Forestry



Construction



Airport



Hunting / Shooting





### 3M<sup>™</sup> Peltor<sup>™</sup> Hearing Communication Solutions



### 3M<sup>™</sup> Peltor<sup>™</sup> WS Workstyle<sup>™</sup>

**Electronic Level Dependent Hearing Protector** 

#### Features and Benefits:

- + Take calls and listen to music wireless with stereo Bluetooth®
- + Ghost voice guided interface
- + Foldable
- + Bluetooth
- + Integrated microphone
- + Level dependent function
- + SNR 26 dB



Description	Product code	Attachment	Weight (g)	Colour
WS WorkStyle/EU/Industry	MT16H21FWS5E-580SV	Head band	352	
WS WorkStyle/UK/Industry	MT16H21FWS5G-580SV	Head band	352	<b>Bir</b>

•

#### Attenuation

MT16H21FWS5*-****	
-------------------	--

63	125	250	500	1000	2000	4000	8000
15.1	11.1	18.2	27.0	23.8	33.4	37.7	38.9
3.8	2.6	2.3	2.2	2.1	3.6	2.2	3.3
11.8	8.5	15.8	24.8	21.7	29.8	35.5	35.5
	15.1 3.8	15.1 11.1 3.8 2.6	15.111.118.23.82.62.3	15.111.118.227.03.82.62.32.2	15.111.118.227.023.83.82.62.32.22.1	15.111.118.227.023.833.43.82.62.32.22.13.6	15.1         11.1         18.2         27.0         23.8         33.4         37.7           3.8         2.6         2.3         2.2         2.1         3.6         2.2

NRR=20 SNR=26 db H=29 db M=23 db L=19 db



### 3M<sup>™</sup> Peltor<sup>™</sup> Radio Hearing Protector

#### **Features and Benefits:**

- + Protect your hearing and listen to the radio at the same time
- Designed for people who work outdoors forestry, landscaping, mowing lawns, hobbies, etc. – to protect their hearing and let them listen to the radio at the same time
- + Extra wide, soft, padded head band distributes weight while two-point suspension exerts low pressure for comfortable, long-term use \_\_\_\_\_
- + Soft, liquid and foam-filled ear cushions provide added comfort
- + Battery lifetime approx. 200 hours
- + Audio input for MP3 player. (Not all models)



Description	Product code	Attachment	Weight (g)	Colour
Standard, audio jack	HRXS7A-01	Head band	340	
Standard, audio jack	HRXS7P3E-01	Helmet attachment	340	

#### HRXS7A-01

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

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

#### HRXS7P3E-01

125	250	500	1000	2000	4000	8000
15,2	21.9	27.2	38.0	31.0	33.3	37.9
3.9	3.7	2.5	3.6	3.7	3.0	2.6
11.3	18.2	24.7	34.4	27.3	30.3	35.3
	15,2 3.9	15,2 21.9 3.9 3.7	15,221.927.23.93.72.5	15,221.927.238.03.93.72.53.6	15,221.927.238.031.03.93.72.53.63.7	15,221.927.238.031.033.33.93.72.53.63.73.0

SNR=29dB H=30dB M=27dB L=19dB



### 3M<sup>™</sup> Peltor<sup>™</sup> Hearing Communication Solutions



### **3M<sup>™</sup> Peltor<sup>™</sup> Alert Hearing Protector**

#### **Electronic Level Dependent FM/AM-Radio**

With Alert you can protect your hearing effectively and at the same time enjoy listening to the radio. Alert is also equipped with a level dependent function which amplifies ambient sound and cut harmful noise above 82 dB(A). This function protect against dangerous noise and lets the user talk and listen to co-workers, hear warning signals or moving vehicles etc. Alert is also available as a headset. The WS Alert headset can be connected to a mobile telephone wirelessly via Bluetooth<sup>™</sup>.

#### **Features and Benefits:**

#### Comfortable

- + Headband wires of stainless steel
- + Contoured cushions provide enhanced slip resistance and a reliable seal
- + High Attenuating shells

#### Convenient

- + Easily accessible control buttons for FM-radio and level dependent function
- + Available as headset
- + FM/AM switch to choose your radio reception

#### Effective

- + SNR of 32dB
- + Level dependent function

#### **Compatible with**

- + DECT- and mobile phones
- + Communication radio
- + Numerous configurations; headband, neckband, helmet attachment

M2RX7A							•
Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	19.7	25.4	31	34.6	32.2	38.7	42.1
Standard Deviation (dB)	3.4	2.5	3.4	1.8	3.6	3.8	3.6
Assumed Protection (dB)	16.3	22.9	27.6	32.8	28.6	34.9	38.5
SNR=32dB H=31dB M=29dB L=24dB							

#### M2RX7P3E

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	20.7	24.7	31	35.1	32.6	40.4	42.1
Standard Deviation (dB)	5.4	3.9	3.4	2.9	3.1	3.1	2.7
Assumed Protection (dB)	15.3	20.8	27.6	32.2	29.5	37.3	39.4

SNR=31dB H=32dB M=29dB L=23dB

#### Peltor™ Alert FM Radio Hearing Protector

Features Colour: Batteries: Operating time:

Wine red AA (2 X 1,5V) 75h (standard model)

Accessories Hygiene kits are available for each muff.

Other 3M<sup>™</sup> Peltor<sup>™</sup> Electronic Hearing Protectors



Peltor<sup>™</sup> Alert FM-Radio Hearing Protector SNR of 32dB



3M<sup>™</sup> Peltor<sup>™</sup> Alert FM-Radio Hearing Protector, Headset SNR of 32dB





### 3M<sup>™</sup> Peltor<sup>™</sup> Pro-Tac<sup>™</sup> II

#### **Electronic Level Dependent Hearing Protector**

With the ProTac II hearing protectors, you are not shut off from the environment, which can be both dangerous and inconvenient. You always hear what is going on around you, and you know that your hearing is protected. The control panel is on the right shell. The buttons are easily accessible and logically positioned. They make it easy to adjust ambient noise.

#### **Features and Benefits:**

#### Comfortable

- + Headband wires of stainless steel\_
- + Contoured cushions provide enhanced slip resistance and a reliable seal
- + High Attenuating shells

#### Convenient

- + Easily accessible control buttons
- + Available as Bluetooth Headset

#### Effective

- + SNR of 32dB
- + Level dependent function
- + Superfast Digital Tuning

#### **Compatible with**

- + DECT- and mobile phones via bluetooth
- + Numerous configurations; headband, neckband, helmet attachment

#### MT15H7A2 \*\* \*\*

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	19.7	25.4	31	34.6	32.2	38.7	42.1
Standard Deviation (dB)	3.4	2.5	3.4	1.8	3.6	3.8	3.6
Assumed Protection (dB)	16.3	22.9	27.6	32.8	28.6	34.9	38.5

SNR=32dB H=31dB M=29dB L=24dB

#### MT15H7B2 \*\* \*\*

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	19.7	25.4	31	34.6	32.2	38.7	42.1
Standard Deviation (dB)	3.4	2.5	3.4	1.8	3.6	3.8	3.6
Assumed Protection (dB)	16.3	22.9	27.6	32.8	28.6	34.9	38.5
SNR=32dB H=31dB M=29dB L=24dB							

#### MT15H7P3\*2 \*\* \*\*

125	250	500	1000	2000	4000	8000
20.7	24.7	31	35.1	32.6	40.4	42.1
5.4	3.9	3.4	2.9	3.1	3.1	2.7
15.3	20.8	27.6	32.2	29.5	37.3	39.4
	20.7 5.4	20.7         24.7           5.4         3.9	20.7         24.7         31           5.4         3.9         3.4	20.7         24.7         31         35.1           5.4         3.9         3.4         2.9	20.724.73135.132.65.43.93.42.93.1	20.7         24.7         31         35.1         32.6         40.4           5.4         3.9         3.4         2.9         3.1         3.1

SNR=31dB H=32dB M=29dB L=23dB

#### 3M<sup>™</sup> Peltor<sup>™</sup> ProTac<sup>™</sup> II Hearing Protectors

#### **Features**

Colour: Batteries: Operating time: Black, Green or Red AA (2 X 1,5V) 1000h (standard model)

Accessories Hygiene kits are available for each muff.

#### Other 3M<sup>™</sup> Peltor<sup>™</sup> Electronic Hearing Protectors



**3M<sup>™</sup> Peltor<sup>™</sup> ProTac<sup>™</sup> II Green Hearing Protector** SNR of 32dB



**3M<sup>™</sup> Peltor<sup>™</sup> ProTac<sup>™</sup> II Red Hearing Protector** SNR of 32dB



**3M<sup>™</sup> Peltor<sup>™</sup> ProTac<sup>™</sup> II Black Hearing Protector** SNR of 32dB

### 3M<sup>™</sup> Peltor<sup>™</sup> Hearing Communication Solutions



### 3M<sup>™</sup> Peltor<sup>™</sup> Tactical<sup>™</sup> XP Headset

#### **Electronic Level Dependent Hearing Protector**

With a new revolutionary digital circuit, Peltor<sup>TM</sup> Tactical<sup>TM</sup> XP hearing protectors allows the user to be extremely selective of what the wearer wants to hear. Peltor<sup>TM</sup> Tactical<sup>TM</sup> XP is equipped with the following functions: Volume for the level dependent function, balance, adjustable

release time, equalizer and volume for external input. With these new functions and features the user is able to adjust the level dependent function to better suit a particular environment or situation. A ghost voice guide the user in the menu system. Peltor<sup>™</sup> Tactical<sup>™</sup> XP is available as headset, wired or wireless (Bluetooth<sup>™</sup>)

#### **Features and Benefits:**

#### Comfortable

- + Soft padded head band with wires of stainless steel
- + Contoured cushions provide enhanced slip resistance and a reliable seal
- + High Attenuating shells

#### Convenient

- + Available as headset
- + Ghost voice guidance
- Equalizer and volume for for external input

#### Effective

- + SNR of 32dB
- + Level dependent function

#### **Compatible with**

- + DECT- and mobile phones
- + Communication radios
- + Numerous configurations; headband, neckband, helmet attachment

#### MT1H7F2

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	13.8	21.5	30.9	36.6	35.9	35.5	39
Standard Deviation (dB)	1.8	0.9	1.3	1.5	5.5	3.1	2.3
Assumed Protection (dB)	12.0	20.6	29.6	35.1	30.4	34.4	36.7
SNR=31dB H=32dB M=25dB L=20 dB							

MT1H7P3\*2

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	14.0	22.4	28.1	33.8	33.4	35.4	38.7
Standard Deviation (dB)	1.5	2.7	1.7	2.3	2.6	2.3	1.8
Assumed Protection (dB)	12.5	19.7	26.4	31.5	30.8	33.1	36.9
SND-21dD H-22dD M-25dD I -20 dD							

SNR=31dB H=32dB M=25dB L=20 dB

#### MT1H7B2

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	13.8	21.5	30.9	36.6	35.9	35.5	39
Standard Deviation (dB)	1.8	0.9	1.3	1.5	5.5	3.1	2.3
Assumed Protection (dB)	12.0	20.6	29.6	35.1	30.4	34.4	36.7

SNR=31dB H=32dB M=25dB L=20 dB



3M<sup>™</sup> Peltor<sup>™</sup> Tactical<sup>™</sup> XP Headset

Features Colour: Batteries: Operating time:

Black AA (2 X 1,5V) 1000h (standard model)

Accessories Hygiene kits are available for each muff.

Other 3M<sup>™</sup> Peltor<sup>™</sup> Electronic Hearing Protectors



3M<sup>™</sup> Peltor<sup>™</sup> Tactical<sup>™</sup> XP Headband SNR of 31dB



3M<sup>™</sup> Peltor<sup>™</sup> Tactical<sup>™</sup> XP Helmet Mounted Headset SNR of 30dB



3M<sup>™</sup> Peltor<sup>™</sup> Tactical<sup>™</sup> XP Neckband SNR of 31dB



### 3M<sup>™</sup> Peltor<sup>™</sup> Lite-Com<sup>™</sup> Basic

#### **Built-in Two-way Communication Headset**

Peltor<sup>™</sup> Lite-Com<sup>™</sup> is a range of products with a communication radio built into the shell. This system provides effective and effortless shortrange two-way communication. 38 subchannels allow several users to communicate individually using the same channel. An electronic voice tells you what settings you are adjusting.

#### **Features and Benefits:**

#### Comfortable

- + Headband wires of stainless steel
- + Contoured cushions provide enhanced slip resistance and a reliable seal
- + High Attenuating shells

#### Convenient

- + Ghost voice guidance
- + Easily accessible control buttons
- + Noise compensated microphone

#### Effective

- + SNR of 31dB
- Communication on 8 channels in the PMR 446MHz band

#### **Compatible with**

- PMR 446 MHz hand held communication radios
- + LiteCom Basic, LiteCom III, LiteCom Pro
- + Numerous configurations; headband, neckband, helmet attachment

00
00

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	13.8	21.5	30.9	36.6	35.9	35.5	39
Standard Deviation (dB)	1.8	0.9	1.3	1.5	5.5	3.1	2.3
Assumed Protection (dB)	12	20.6	29.6	35.1	30.4	32.4	36.7
SNR=31dB H=32dB M=29dB L=20dB							

#### MT53H7A4400

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	14	22.4	28.1	33.8	33.4	35.4	38.7
Standard Deviation (dB)	1.5	2.7	1.7	2.3	2.6	2.3	1.8
Assumed Protection (dB)	12.5	19.7	26.4	31.5	30.8	33.1	36.9
SND-21dD H-22dD M-20dD I -20dD							

SNR=31dB H=32dB M=29dB L=20dB



3M<sup>™</sup> Peltor<sup>™</sup> Lite-Com<sup>™</sup> Basic Built-in Two-way Communication Headset

#### **Features**

Colour: Batteries: Operating time: Dark Blue AA (2 X 1,5V) 10-35h (depending on transmission time)

Accessories Hygiene kits are available for each muff.

#### Other 3M<sup>™</sup> Peltor<sup>™</sup> Electronic Hearing Protectors



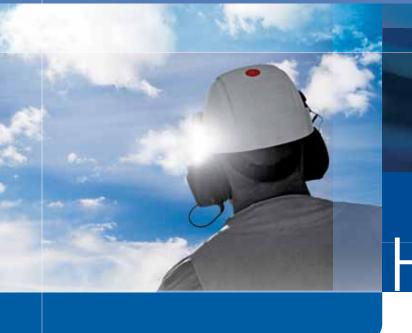
3M<sup>™</sup> Peltor<sup>™</sup> Lite-Com<sup>™</sup> Basic Hearing Protectors, Headband SNR of 31dB



3M<sup>™</sup> Peltor<sup>™</sup> Lite-Com<sup>™</sup> Basic Hearing Protectors, Helmet Mount SNR of 30dB

#### 3M<sup>TA</sup> Lite-I Hear Neck SNR (

3M<sup>™</sup> Peltor<sup>™</sup> Lite-Com<sup>™</sup> Basic Hearing Protectors, Neckband SNR of 31dB





## Integrated Head & Face Solutions

#### 3M<sup>™</sup> Peltor<sup>™</sup> Head and Face Solutions

The Peltor brand offers a complete line of safety helmets, visors, combinations and accessories for anyone exposed to hazardous environments. Our goal is continuous improvement of our products to provide the optimal balance of comfort and safety.





### 3M<sup>™</sup> Peltor<sup>™</sup> Uvicator<sup>™</sup> Technology for safer working conditions

When a safety helmet is exposed to sun light the stability of the plastic shell may be adversely affected due to interaction between sunlight and plastic material which may weaken the helmet and compromise safety of the wearer. The adverse effect is dependent not only on the nature of the plastic material but also intensity of sun light. All too often damage to the helmet shell may not be visible to the naked eye.

#### Red, the new sign of safety

The patented Uvicator technology is intended to easily and clearly help show the user when his/her helmet has been over-exposed to UV-radiation and thus when to replace it. This new technology is the result of many years of full scale and artificial ageing testing of different material combinations under various sunlight exposure conditions.

As the helmet is exposed to sunlight, the Uvicator indicator is calibrated to detect the amount of UV radiation received and gradually changes colour over time, clockwise, from red to white. When the Uvicator indicator turns completely white, it means that the helmet has received maximum tolerable radiation and therefore needs to be replaced. There can't be any easier solution!





# Peltor<sup>™</sup> Head and Face Head Protection

### 3M<sup>™</sup> Peltor<sup>™</sup> G2000 Helmet

Attractive design and excellent protection! That's the easiest way to summarise the G2000 helmet. The helmet goes well beyond the requirements for formal testing and is comfortable with its low back and relatively low profile.

It was designed to accommodate additional accessories, such as integrated eyewear, visor and hearing protection.



#### Ventilation

+ For comfort, good ventilation is a must, particularly in warm environments. The G2000 Helmet allows free airflow between the helmet and its harness. Combined with ventilation inlet in the top of the helmet, this helps to increase wearers acceptance

#### **Optional space for** customised print

+ A flat surface for printing a logotype, brand name, etc.

#### 3M<sup>™</sup> Peltor<sup>™</sup> Uvicator<sup>™</sup> Technology

+ The disc tells you when it's time to replace your helmet

#### **Neck protection**

+ Extended edge on the back of the helmet provides extra protection for the sensitive neck area

#### Headband

+ This important feature determines how steadily the helmet sits on the head. Easy to adjust

#### **Optimal profile for ear muffs**

+ The G2000 helmet features a special profile design to enable helmet mounted ear muffs to achieve optimal fit and maximum adjustability for individual needs

#### Attachment point for accessories

+ An adjustable snap attachment in the balance point of the helmet to allow simple attachment of accessories, such as muffs, headsets and visors

#### Sweatband

+ Easy to replace for highest comfort and hygiene. Also available in soft leather





**Ratchet headband** For easier and quicker adjustment.

3M<sup>™</sup> Peltor<sup>™</sup> G2000 Series Helmets Available in 7 colours, with or without ratchet suspension

#### Other 3M<sup>™</sup> Peltor<sup>™</sup> Head Protection Products



3M<sup>™</sup> Peltor<sup>™</sup> G3000 Helmet Slim design and shorter peak Available in 7 colours, with or without ratchet suspension, in high-visibility version (G3000 Hi-Viz)

#### 3M<sup>™</sup> Forestry Helmet Combination

Ready-to-use combination for forestry workers Includes: G3000 helmet, V4CK mesh visor, H31P3E ear muffs, **GR3C** rain protection

#### 3M<sup>™</sup> Industrial Helmet Combination

Di-electric combination specially designed for work in electrical environments Includes: G2001 helmet, H31P3K-01 ear muffs, V4H clear visor

#### 3M<sup>™</sup> Integrated Eyewear

Designed to be used with Peltor™ helmets. The patented design allows the glasses to slide easily between the helmet shell and lining. Available in Grey, Yellow, Clear.

#### 3M<sup>™</sup> Helmet Accessories

A wide range of accessories are available, including sweatbands, chin straps, rain protection, etc...

Polyester cradle



Leather sweatband















PVC sweatband

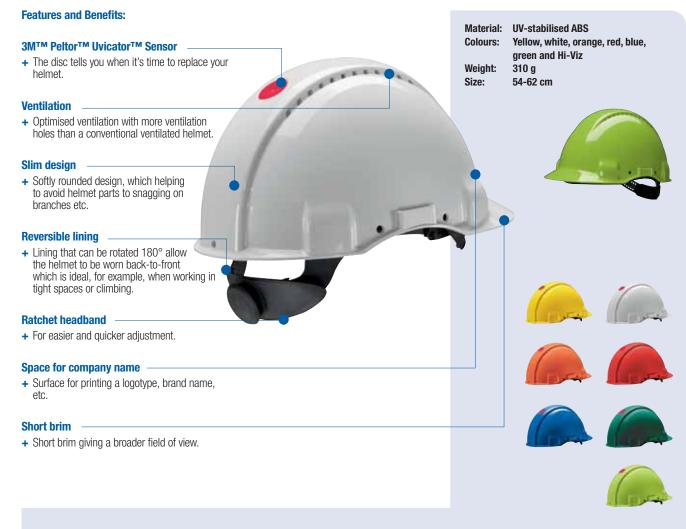


### 3M<sup>™</sup> Peltor<sup>™</sup> G3000 Helmet

The G3000 helmet has been designed in close collaboration with forestry and industrial workers. It is intended for use in harsh environments with tough demands for effective protection, excellent ventilation and a maximum field of vision.

#### 3M<sup>™</sup> Peltor<sup>™</sup> G3000 Hi-Viz Helmet

The G3000 Hi-Viz helmet is a safety helmet with the same properties as the G3000 but for users who want to be extra visible at work. The helmet has the same protection class as the standard-version G3000.



The unique characteristics of the G3000 helmet are: Offers excellent protection and fully approved against EN 397, with the following additional approvals:

- G3000\*
  - low temperature, -30°C, and molten metal, MM
- G3001\*

(unventilated): low temperature, -30°C, molten metal, MM, and electrical insulation 440Vac,

• G3001\* 1000V

 G3000\*-10\* (with lamp and cord holder) low temperature, -30°C and molten metal. MM

# ace Protection

### Peltor<sup>™</sup> Multisystem

The Peltor<sup>™</sup> Multi System provides a convenient, comfortable and versatile solution to wearers who require both face and hearing protection. It has been specifically designed to be used with our passive and communication earmuffs to ensure excellent compatibility and maximum convenience. The wide range of visors and hearing protectors allows for many combinations.





### 3M<sup>™</sup> Peltor<sup>™</sup> Head and Face Face Protection



### Peltor<sup>™</sup> V40 Multisystem

The Peltor<sup>™</sup> V40 Multisystem is specially designed to be combined with hearing protectors or a built-in communication system. A practical, convenient solution for face and hearing protection where no helmet is needed. The wide range of visors and hearing protectors allows for many combinations. He system can be adapted as needed, boosting safety, enjoyment and comfort. The Peltor<sup>™</sup> V40 Multisystem is perfect for the manufacturing industry, agriculture or park work. Easy to install on all Peltor hearing protectors with a headband. The visors are CE-approved.

#### **Features and Benefits:**

#### **Unique forehead shield**

+ Extends well over the forehead and reduces the risk of foreign particles penetrating from above

#### Shade from the peak

 Improves visibility and reduces the likelihood of rainwater or dirt sticking to the visor

#### **Effective protection**

 The visor is angled towards the chin and is swept back towards the ears, providing maximum face protection

#### High comfort

 Peltor hearing protectors feature soft, comfortable sealing cups and distinct band design which increases wearer acceptability

#### Flip-up

 A function which makes it easy to flip the visor up or down quickly and simply

#### **Simple installation**

 Clips conveniently into place on the hearing protector's headband



#### **Industrial Multisystem**

Used as a splash guard in industrial activities such as grinding and cleaning. **Includes:** H510A hearing protector, V40F polycarbonate visor, snap-in replacement visor, slimline and flip-up function.



#### Forestry Multisystem

Used in clearing and edge trimming with power equipment.

Includes: H31A hearing protector. V40C stainless steel mesh visor, snap-in replacement visor, slimline and flip-up function.

#### Other 3M<sup>™</sup> Face Protection Products



#### 3M<sup>™</sup> Tuffmaster<sup>™</sup> Headgear

A robust, easy-to-use standalone face protection system, available with a range of visors to meet the requirements of most industrial applications. Available with or without ratchet suspension.



3M<sup>™</sup> WP Series Visors To be used with 3M<sup>™</sup> Tuffmaster<sup>™</sup> Headgear. Available in clear, mesh, welding shade 3 and 5.

#### V1/V4 Series mesh visors A complete range of mesh visors designed to be used

in combination with safety helmets. Available in steel, stainless steel or polyamide.

#### V2/V4 Series clear visors

A complete range of clear visors to be used in combination with safety helmets. Available in clear polycarbonate, green polycarbonate or acetate, anti-fog and/or anti-scratch.

# Protection, Comfort & style

#### **Eye Protection by 3M**

3M, the world's leader in safety and protective equipment, is proud to have the Aearo eyewear range as part of its product offering. This catalogue shows just a selection of our range.

The new portfolio of  $3M^{TM}$  Eye Protection products promises superior quality eyewear that provides an optimal balance of comfort, protection and design.

It is our goal is to ensure that we satisfy your needs through the provision of exceptional leadership, expertise, quality and service excellence. With our global technology, manufacturing and knowledge network we do more than simply develop products that help your workforce to operate in safety and comfort. Advanced engineering and technology paired with the high standard of quality and innovation of a continuously evolving range of product solutions that you, our customers, come to expect from 3M.



#### Style

Style is a critical factor when it comes to raising the acceptance of the user to wear personal protective equipment (PPE). 3M's range of eyewear gives you a variety of modern and stylish products to choose from.

#### Protection

The premium range of safety spectacles offers the highest optical class. A broad range of eyewear products include durable anti-scratch and convenient anti-fog coatings. All safety spectacles and goggles by 3M offer reliable UV protection and are all approved to EN166 and are CE marked.

#### Comfort

Many of our products come with adjustable features and soft materials in points of contact in order to improve fit and comfort to accommodate different face sizes and shapes.

#### Compatibility

Eye protection often needs to be worn in conjunction with other protective equipment and it is essential that comfort and fit with other PPE is maintained. The eyewear range can be used in combination with respiratory and hearing protection by 3M. Compatibility with other PPE will be subject to a number of variable factors which requires employer and end user to conduct an appropriate selection depending on individual needs.



### 3M<sup>™</sup> Eye **Protection**



### 3M<sup>™</sup> 2800 Safety Overspectacles

The 3M 2800 Safety Overspectacles are designed to fit over most users' prescription spectacles with minimal interference. They offer an excellent coverage and field of vision, combined with a high level of protection against impacts.

#### **Features and Benefits:**

#### **Style**

+ Versatile design allows use with wide variety of prescription spectacles

#### **Premium Protection**

- Optical Class 1 for high optical clarity to allow prolonged, comfortable wear
- + Polycarbonate lens offers good impact resistance with Anti-Scratch coating for improved durability

#### Comfort

- Adjustable length temples (4 positions) \_ for optimal comfort and fit
- + Inclinable lens for easy adjustment and maximum comfort
- + Soft low profile temples for comfort and minimum interaction with prescription spectacles

3M™ 2805 Ovespectacles Lens colour: IR Shade 5/Green Lens material: polycarbonate

Other 3M<sup>™</sup> and 2800 Ovespectacles



3M™ 2800 Overspectacles Lens colour: clear Lens material: polycarbonate



3M™ 2802 Overspectacles Lens colour: amber Lens material: polycarbonate



### 3M<sup>™</sup> 2820 Classic Line Spectacles

Very lightweight, the 3M 2820 Spectacles are a sleek, modern design offering excellent coverage and field of vision.

#### **Features and Benefits:**

#### **Style**

+ Stylish and modern design, eye protection is more likely to be worn if it looks good

#### **Premium Protection**

- + Optical Class 1 for high optical clarity and extended wear time
- + Polycarbonate lens offers good impact resistance
- Wrap-around design for increased lateral protection \_

#### Comfort

- + Very lightweight
- + Temple pivots for adjustable the lens angles
- + Soft, flexible temples for improved comfort

#### **Compatible with**

 Combines well with 3M<sup>™</sup> 9300 series respirators —









3M<sup>™</sup> 2820 Classic Line Spectacles Lens colour: clear Lens material: polycarbonate

### ye Protection



### 3M<sup>™</sup> 2720 Classic Line Spectacles

Cost-effective protection and comfort. 3M 2720 Classic Line Spectacles are lightweight and offer the wearer high levels of comfort together with reliable protection.

#### **Features and Benefits:** 3M<sup>™</sup> 2720 Classic Line Spectacles Lens colour: clear **Style** Lens material: polycarbonate + 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 + Good impact resistance with Anti-Scratch coating for improved durability + Special Anti-Fog coating which reduces fogging and ensures clearer vision Comfort + Lightweight and comfortable **Compatible with** + Slim nose bridge and flat temples for improved compatibility with other PPE + Combines well with 3M<sup>™</sup> 9300 Series Respirators Other 3M<sup>™</sup> 2720 Classic Line spectacles 3M™ 2721 Lens colour: smoke for



**Classic Line Spectacles** additional sun glare protection Lens material: polycarbonate



3M™ 2722 **Classic Line Spectacles** Lens colour: yellow for contrast enhancement requirements Lens material: polycarbonate



### 3M<sup>™</sup> Tora<sup>™</sup> Classic Line Spectacles

Tora Classic Line Spectacles cool image and perfect fit makes this line of protective eyewear very popular amongst younger members of staff.

#### **Features and Benefits:**

#### **Style**

- Stylish and modern design, eye protection is more likely to be worn if it looks good
- + Lenses and temples in combined colours intensify the contemporary smart look \_\_\_\_\_

#### **Premium Protection**

- 9D base curved lens offer excellent peripheral vision and perfect lateral side protection
- + Good impact resistance with Anti-Scratch coating for improved durability
- Special Anti-Fog coating which reduces fogging and ensures clearer vision

#### Comfort

+ Lightweight and comfortable

#### **Compatible with**

+ Slim nose bridge and flat temples for improved compatibility with other PPE 3M™ Tora™ Classic Line Spectacles Lens colour: bronze Lens material: polycarbonate

Other 3M<sup>™</sup> Tora<sup>™</sup> Classic Line spectacles

3M™ Tora ™ Classic Line Spectacles Lens colour: clear Lens material: polycarbonate



3M™ Tora™ Classic Line Spectacles Lens colour: yellow Lens material: polycarbonate

### Ve Protection



### 3M<sup>™</sup> 2840 Comfort Line Spectacles

Protection, comfort and adjustability. With a new, unique style, the 3M 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 2840 spectacles also feature an integrated browguard for

increased protection incorporating a strong polycarbonate lens with anti-scratch and anti-fog coating (except 3M<sup>™</sup> 2844 spectacles), they are available in 6 lens options.

#### **Features and Benefits:**

#### Style

+ Stylish and modern design, eye protection is more likely to be worn if it looks good

#### **Premium Protection**

- + Optical Class 1 for high optical clarity to allow prolonged, comfortable wear
- + Integrated browguard for increased protection
- + Strong polycarbonate lens with anti-scratch and anti-fog coating
- + Polycarbonate lens for good impact protection

#### Comfort

- + Adjustable temple length (3 positions) for comfort and optimal fit
- + Soft inner padding on temple for increased comfort and stability when worn
- + Inclinable lens enabling individual adjustment and optimal personal fit
- + Lightweight (26g)

#### **Compatible with**

+ Ideal combination with 3M<sup>™</sup> 9300 Series and 3M<sup>™</sup> 4000 Series Respirators and the 3M<sup>™</sup> 7500 Series Half Masks.



3M<sup>™</sup> 2840 Comfort Line Spectacles Lens colour: clear Lens material: polycarbonate

#### Other 3M<sup>™</sup> 2840 Comfort Line Spectacles

M



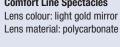
3M<sup>™</sup> 2841 **Comfort Line Spectacles** Lens colour: smoke Lens material: polycarbonate



3M™ 2842 **Comfort Line Spectacles** Lens colour: yellow Lens material: polycarbonate









3M™ 2846 **Comfort Line Spectacles** Lens colour: red-orange Lens material: polycarbonate



3M<sup>™</sup> 2845 **Comfort Line Spectacles** Lens colour: IR shade 5 Lens material: polycarbonate



### 3M<sup>™</sup> Solus<sup>™</sup> Comfort Line Spectacles

Protection, comfort and adjustability. Solus Comfort Line Spectacles combine a modern design and an optimal duel technology, with the soft inner padding of the temple, leading to increased comfort and protection, without optical distortion.

#### **Features and Benefits:**

#### **Style**

- Stylish and modern design, eye protection is more likely to be worn if it looks good
- With colour-accented temples, to the high profile dual lens look of fashion street wear, Solus brings sophistication and comfort to safety eyewear

#### **Premium Protection**

- The lens curve has been calculated for each eye separately to optimise the field of vision
- Blue lens with a light flash mirror coating to remove eye stress and fatigue often occurring in monochromatic (single colour) yellow lit environments
- + Perfect in work environments where there is strong glare from bright lighting
- + Strong PC lenses with anti-scratch and anti-fog coating

#### Comfort

- + Lightweight (23g)
- + Soft inner padding on temple for increased comfort and stability when worn

#### **Compatible with**

+ Specially designed for improved compatibility with other PPE

3M™ Solus™ Comfort Line Spectacles Lens colour: amber Lens material: polycarbonate

#### Other 3M<sup>™</sup> Solus<sup>™</sup> Comfort Line Spectacles



3M<sup>™</sup> Solus<sup>™</sup> Comfort Line Spectacles Lens colour: red mirror Lens material: polycarbonate



3M<sup>™</sup> Solus<sup>™</sup> Comfort Line Spectacles Lens colour: bronze Lens material: polycarbonate



3M<sup>™</sup> Solus<sup>™</sup> Comfort Line Spectacles Lens colour: I/O (indoor/ outdoor) Lens material: polycarbonate



3M<sup>™</sup> Solus<sup>™</sup> Comfort Line Spectacles Lens colour: clear Lens material: polycarbonate

### 3M<sup>™</sup> Eye **Protection**



### 3M<sup>™</sup> Maxim<sup>™</sup> Comfort Line Spectacles

Protection, comfort, and adjustability, Maxim comfort line spectacles, all have a unique patented aspherical lens for 180° of pure vision and eye coverage. The temples are fully inclinable and adjustable in length for optimal fit. They are available in more than 15 different lens and frame options.

The unique minimizer option for welding assistance protects against Infra-red without blocking visible light.

3M<sup>™</sup> Maxim<sup>™</sup> Premium Line Spectacles

Lens colour: clear

Lens material: polycarbonate

#### **Features and Benefits:**

#### Style

+ Stylish and modern design

#### **Premium Protection**

- Patented aspherical lens for 180° of Pure Vision and superior eye coverage
- Ventilation channel across the lens to minimise misting
- + DX Coating to resist fogging, scratching, chemicals, and to make it anti static

#### Comfort

- + Soft, universal-fit nosebridge
- + Dual-injected cushion browguard for extra comfort and shock absorbsion
- Adjustable length temples with pantoscopic system \_

#### **Compatible with**

 Specially designed for improved compatibility with other PPE i.e. Maxim Ballistic version specially designed to be worn with earmuffs \_\_\_\_\_





3M<sup>™</sup> Maxim<sup>™</sup> Ballistic Premium Line Spectacles Lens colour: clear Lens material: polycarbonate



3M™ Maxim™ Ballistic Premium Line Spectacles Lens colour: amber Lens material: polycarbonate



3M<sup>™</sup> Maxim<sup>™</sup> Ballistic Premium Line Spectacles Lens colour: bronze Lens material: polycarbonate



3M<sup>™</sup> Maxim<sup>™</sup> Ballistic Premium Line Spectacles Lens colour: red Lens material: polycarbonate

Other 3M<sup>™</sup> Maxim<sup>™</sup> Premium Line Spectacles



3M<sup>™</sup> Maxim<sup>™</sup> Welding Premium Line Spectacles Lens colour: shade 5.0 Lens material: polycarbonate



3M<sup>™</sup> Maxim<sup>™</sup> Utility Pack Lens colour: clear, bronze and amber Lens material: polycarbonate



3M<sup>™</sup> Maxim<sup>™</sup> Ballistic Premium Line Spectacles Band Lens colour: bronze Lens material: polycarbonate



### **3M<sup>™</sup> Marcus Gronholm Premium Line Spectacles**

Protection, comfort, and stylish design. Marcus Gronholm premium line spectacles combine attractive and modern styling with wraparound design. The strong, hypoallergenic metal frame exists in 2 sizes to fit everyone.

#### **Features and Benefits:** 3M<sup>™</sup> Marcus Gronholm Premium Line **Spectacles Style** Lens colour: Blue Mirror + Stylish and modern design, eye protection is Material: Polycarbonate more likely to be worn if it looks good + Wraparound design + Bronze and blue mirror lenses suitable for working environments that require additional sun protection **Premium Protection** + De-centered Polycarbonate twin lens, deeply curved for superior eye coverage and optimal field of view + Strong polycarbonate lens with anti-scratch and anti-fog coating Comfort + Hypoallergenic metal frames with adjustable nosepiece + Formable rubber tipped temples for extra comfort and adjustability + Flat temples with spring hinges to wear under Other 3M<sup>™</sup> Marcus Gronholm Products helmet 3M<sup>™</sup> Marcus Gronholm **Compatible with** Premium Line Spectacles + Slim nose bridge and flat temples for improved compatibility with other PPE Lens colour: bronze Material: polycarbonate + Ideal combination with 3M<sup>™</sup> 9300 Series and 3M<sup>™</sup> 4000 Series Respirators and the 3M<sup>™</sup> 7500 Series Half Masks 3M<sup>™</sup> Marcus Gronholm Premium Line Spectacles Lens colour: clear Material: polycarbonate 3M<sup>™</sup> Marcus Gronholm Large Size Premium Line Spectacles Lens colour: clear

Material: polycarbonate

### BM<sup>™</sup> Eye Protection



### 3M<sup>™</sup> Refine 300 Series Premium Line Spectacles

#### Better Style means better compliance

Women don't have to settle for the bulky, oversized eyewear anymore. The new Refine 300 safety eyewear is specially sized for women's smaller facial profiles. Refine 300 Safety Eyewear is especially designed to fit smaller head & face shapes. The result is excellent coverage with fewer gaps where dangerous particulates or flying debris can damage the eyes. Appealing, well-fitting design will lead to increased wearer acceptance.

3M<sup>™</sup> Refine 300 Series Spectacles

Lens colour: mocha

Lens material: polycarbonate

#### **Features and Benefits:**

#### **Style**

- + Slim frame design
- + Padded, adjustable nose-bridge
- + Clear and bronze anti-fog and anti-scratch lenses
- + Meets the low energy requirements of EN 166

#### **Premium Protection**

- The lens curve has been calculated for each eye separately to optimise the field of vision
- + Strong polycarbonate lens with anti-scratch and anti-fog coating
- + Integrated side protection

#### Comfort

- + Specific slim design that fits smaller faces
- + Adjustable soft nose pads to improve comfort

#### **Compatible with**

+ Compatible with 3M's respiratory protection range



Other 3M<sup>™</sup> Refine 300 Spectacles



3M<sup>™</sup> Refine 300 Series Spectacles Lens colour: clear Lens material: polycarbonate



### 3M<sup>™</sup> 1100E / 1200E Series Premium Line Spectacles

Introducing safety eyewear that combines the edgy styling and solid performance that workers crave. Upgrade your safety compliance with the new 3M 1100E and 1200E Series.

With inspired designs and a solid frame construction, the new 1100E and 1200E styles deliver the looks, attitude and brand that workers want to wear.

#### **Features and Benefits:**

#### Style: 1100E

- + Wrap-around frame
- + Wide temples with integrated side protection
- + Polycarbonate lenses absorb 99.9% UV radiation
- + Soft, adjustable nose-bridge
- + Meets the low-energy requirements of EN 166
- + Available in two lens options: clear, grey

#### Style: 1200E

- + Lightweight, half-frame
- + Polycarbonate lenses absorb 99.9% UV radiation
- + Soft, adjustable nose-bridge
- + Meets the high-impact requirements of EN 166
- + Available in two lens options: clear, grey

#### **Style**

- + Stylish and modern design
- + The 1100E and 1200E styles deliver the looks, attitude and brand that workers want to wear

#### **Premium Protection**

- Made from a high density nylon material for robust protection
- + Strong polycarbonate lens with anti-scratch and anti-fog coating
- + Each pair comes with a microfiber pouch

#### Comfort

- + Soft adjustable nosepiece
- + Light, wrap around frame assures a comfortable fit
- + Integrated side protection in the temples (1100E)
- + Half frame design for even more weight reduction (1200E)

#### **Compatible with**

Nose bridge specially designed to fit with 3M respirators

3M<sup>™</sup> 1200E Premium Line Spectacles Lens colour: Clear - Grey Material: Polycarbonate

#### Other 3M<sup>™</sup> 1100E/1200E Spectacles



3M<sup>™</sup> 1200E Spectacles Lens colour: clear Material: polycarbonate



3M<sup>™</sup> 1100E Spectacles Lens colour: clear Material: polycarbonate



3M<sup>™</sup> 1100E Spectacles Lens colour: grey Material: polycarbonate

### 3M<sup>™</sup> Eye **Protection**



### 3M<sup>™</sup> Fuel<sup>™</sup> X2 Series Premium Line Spectacles

Pump up your safety compliance levels with some of the best looking protective eyewear on the market. The new Fuel X2 Series Spectacles– the crossroads of compliance and style.

An ultra efficient blend of comfort and style, Fuel X2 offers a refined look and superb features. The revolutionary frame design features bold new grooved styling, rubber over-moulded adjustable temples and a fully adjustable nose-bridge. The sleek frame profile and rimless lower lenses help ensure that protection and performance remain uncompromised.

#### **Features and Benefits:**

#### **Style**

- + Rubber over-moulded adjustable temples
- + Soft, adjustable nose-bridge
- + Polycarbonate lenses absorb 99.9% UV radiation
- + Half frame design
- + Meets the low energy requirements of EN 166
- + Each pair comes with a microfibre pouch

#### **Premium Protection**

- Made from a high density nylon material for impact, torsion and extreme heat resistance
- + Special mirror coating provides scratch resistance and extreme UV protection
- + Strong polycarbonate lens with anti-scratch and anti-fog coating

#### Comfort

- + Soft, universal-fit nosebridge
- + Unique adjustable length temples

#### **Compatible with**

+ Compatible with other 3M PPE products



3M<sup>TM</sup> Fuel<sup>TM</sup> X2 Premium Line Spectacles Lens colour: red mirror Lens material: polycarbonate

#### Other 3M<sup>™</sup> Premium Line Spectacles



3M<sup>™</sup> Fuel<sup>™</sup> X2 Premium Line Spectacles Lens colour: bronze Lens material: polycarbonate

10



3M<sup>™</sup> Fuel<sup>™</sup> X2 Premium Line Spectacles Lens colour: clear Lens material: polycarbonate



### **3M<sup>™</sup> BX<sup>™</sup> Premium Line Spectacles**

The sleek, contoured and fully adjustable BX model is designed for today's flexible work force. Also available in bi-focal lenses that provides magnification for reading or precision work.

#### **Features and Benefits:**

#### Style

+ Stylish and modern design

#### **Premium Protection**

- Special Anti-Fog coating reduces fogging and ensures clearer vision
- + Excellent protection against flying particles

#### Comfort

- + Soft tip temples to improve comfort \_\_\_\_
- + Soft, universal-fit nose bridge
- + Adjustable length temples with pantoscopic system (3 angles for custom fit)

#### **Compatible with**

+ Special design for improved compatibility with other PPE

Other 3M<sup>™</sup> BX Premium Spectacles

3M<sup>™</sup> BX<sup>™</sup> Premium Line Spectacles

Lens colour: clear

Lens material: polycarbonate



3M™ BX™ Premium Line Spectacles Lens colour: grey Lens material: polycarbonate



3M<sup>TM</sup> BX<sup>TM</sup> Readers Premium Line Spectacles Lens colour: clear Lens material: polycarbonate

### 3M<sup>™</sup> Eye **Protection**



### 3M<sup>™</sup> LED Light Vision<sup>™</sup> Premium Line Spectacles

LED Light Vision premium line spectacles will allow you to light a dark zone while protecting your eyes and having hands-free for working. This new innovation opens new horizons for safety: electrical work, car repair, plumbing, home-work, mechanical work in dark environment, night time reading.

#### **Features and Benefits:**

#### Style

+ Modern and stylish design

#### **Premium Protection**

- This safety spectacle is equipped with \_\_\_\_\_ an adjustable ultra-bright LED with long battery life (over 50 hours)
- + The Polycarbonate anti-fog lens protects against UV and impact at extreme temperatures \_\_\_\_\_

#### Comfort

+ The frame has rubber temples and rubber nose pads for extra-comfort

#### **Compatible with**

+ Special design for improved compatibility with other PPE

3M<sup>™</sup> LED Light Vision<sup>™</sup> Premium Line Spectacles Lens colour: clear Lens material: polycarbonate





#### Similar 3M<sup>™</sup> Products



3M<sup>™</sup> Headlights Separate headlights compatible with all 3M<sup>™</sup> spectacles.



### 3M<sup>™</sup> MAXIM<sup>™</sup> Hybrid Goggles

The Maxim Hybrid goggle is a very lightweight, low profile form of eyewear protection that provides the same protection as a goggle. It provides high comfort and unsurpassed protection against liquid droplets and mechanical hazards. The slim design offers improved comfort and wearer acceptance.

#### **Features and Benefits:**

#### **Style**

+ Modern and slim design

#### **Premium Protection**

- Patented aspherical lens for 180° field of view and superior eye coverage
- + DX Coating to resist fogging, scratching, chemicals, and to make it more anti static
- + High performance ventilation system

#### Compatiblity

+ Special design for improved compatibility with other PPE

3M<sup>™</sup> Maxim<sup>™</sup> Hybrid Goggles Lens colour: clear Lens material: polycarbonate





### BM<sup>™</sup> Eye Protection



### 3M<sup>™</sup> 2890 Comfort Safety Goggles

The 3M 2890 comfort safety goggles features a modern, slim design and are available with four different options using either an acetate or polycarbonate lens with either sealed or indirect ventilation. They are suitable for a number of different applications where a versatile, comfortable goggle is required.

#### **Features and Benefits:**

#### Style

+ Modern, slim-line and lightweight design for an excellent fit \_\_\_\_\_

#### **Premium Protection**

- Optical clarity Class 1 to allow prolonged, comfortable wear
- + Sealed design (3M<sup>™</sup> 2890S & 3M<sup>™</sup> 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)
- Special 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

#### **Compatible with**

 + Ideal combination with 3M<sup>™</sup> 9300 Series and 3M<sup>™</sup> 4000 Series Respirators and the 3M<sup>™</sup> 7500 Series Half Masks 
 3M™ 2890 Goggles

 (Polycarbonate)

 3M™ 2890A Goggles

 (Acetate)

 3M™ 2890S Goggles

 (Sealed & Polycarbonate)

 3M™ 2890AS Goggles

 (Sealed & Acetate)

#### **Replacement Lens options**



3M™ 289 Replacement Lens Lens material: clear Lens material: polycarbonate



3M<sup>™</sup> 289A Replacement Lens Lens colour: clear Lens material: acetate



# 3M<sup>™</sup> Fahrenheit<sup>™</sup> Comfort Goggle

The Fahrenheit comfort goggle features a modern, slim design and is available with an acetate or polycarbonate lens with either sealed or indirect ventilation. It is suitable for a number of different applications where a versatile, comfortable goggle is required.

#### **Features and Benefits:**

### **Style**

+ Modern, slim-line and lightweight design for an excellent fit

#### **Premium Protection**

- Aerodynamic shape with cylindrical lens for 180° of distortion-free vision
- + Model specially designed to fit with prescription glasses, dust mask or respiratory half-mask
- Indirect ventilation system to prevent fog, liquids and dust (the non-vented version also provides protection against gas and fumes)

#### Comfort

- Soft PVC crystal frame with a wide support area all around the face to enhance comfort. Specific channel on the side of the frame to accommodate the temple of prescription frames
- Wide nylon elastic strap (25mm) which is easily adjustable thanks to a buckle system and to a pivoting strap attachment mechanism
- + A Neoprene headband, easy to clean, specially for the food industry

#### **Compatible with**

+ Special Helmet version is compatible with Peltor<sup>™</sup> G3000 helmet.

3M<sup>™</sup> Fahrenheit<sup>™</sup> Comfort Goggle Lens colour: clear Lens material: polycarbonate



Other 3M<sup>™</sup> Fahrenheit products



3M<sup>™</sup> Fahrenheit<sup>™</sup> for Peltor<sup>™</sup> Helmet Lens colour: clear Lens material: acetate



3M<sup>™</sup> Fahrenheit<sup>™</sup> T-N-Wear Lens colour: clear Lens material: acetate

3M <sup>™</sup> Eyewear	Product Code	Lens Type	Impact Protection	Coating	Filter	VLT	EN166 Lens marking	
Overspectacles								
2800 Clear	2800	PC Clear	FT	AS	UV	91%	2C-1.2 3M 1 FT	
2802 Yellow	2802	PC Amber	FT	AS	UV- Blue Light	84%	2-1.2 3M 1 FT	
2805 Shade 5.0	2805	PC Shade 5.0	FT	AS	Welding UV- IR	<1%	4-5 3M 1 FT	
Spectacles								
2820 Clear	2820	PC Clear	FT	AS-AF	UV	92%	2C-1.2 3M 1FT	
2821 Grey	2821	PC Grey	FT	AS-AF	UV	18%	5-2.1 3M 1 FT	
2822 Amber	2822	PC Amber	FT	AS-AF	UV	92%	2-1.1 3M 1 FT	
2720 Clear	2720	PC Clear	FT	AS-AF	UV	93%	2C-1.2 3M 1 FT	
2721 Grey	2721	PC Grey	FT	AS-AF	Solar	18%	5-2.5 3M 1 FT	
2722 Yellow	2722	PC Amber	FT	AS-AF	UV - Blue Light	93%	2-1.2 3M 1 FT	
Tora Clear	71501-00001	PC Clear	FT	AS-AF	UV	92%	2C-1.2 3M 1 FT	
Tora Bronze	71501-00002	PC Bronze	FT	AS-AF	Solar- Blue Light	20%	5-2.5 3M 1 FT	
Tora Amber	71501-00003	PC Amber	FT	AS-AF	UV - Blue Light	87%	2C-1.2 3M 1 FT	
2840 Clear	2840	PC Clear	FT	AS-AF	UV	93%	2C-1.2 3M 1 FT	
2841 Grey	2841	PC Grey	FT	AS-AF	Solar	19%	5-2.5 3M 1FT	
2842 Yellow	2842	PC Amber	FT	AS-AF		93%	2-1.2 3M 1 FT	
					UV Blue Light			
2844 I/O	2844	PC I/O Mirror	FT	Mirror	Solar Glare	53%	5-1.7 3M 1 FT	
2845 Shade 5.0	2845	PC Shade 5.0	FT	AS-AF	Welding UV- IR	2%	5 3M 1 FT	
2846 Red-Orange Tint	2846	PC Orange	FT	AS-AF	UV Blue Light	45%	2-1.7 3M 1 FT	
Solus Clear AS	71505-00001	PC Clear	FT	AS	UV	92%	2C-1.2 3M 1 FT	
Solus Amber	71505-00009	PC Amber	FT	AS-AF	UV Blue Light	94%	2C-1.2 3M 1 FT	
Solus Bronze	71505-00003	PC Bronze	FT	AS-AF	Solar Glare	16%	5-3.1 3M 1 FT	
Solus I/O	71505-00005	PC I/O Mirror	FT	Mirror	Solar Glare	55%	5-1.7 3M 1 FT	
Solus Red Mirror	71505-00006	PC Red Mirror	FT	Mirror	Solar Glare	16%	5-1.7 3M 1 FT	
Maxim Blk Adj Clear	13225-00000	PC Clear	FT	DX	UV	92%	2C-1.2 3M 1 FT	
Maxim Blk Welding Shade 5.0	13324-00000	PC Shade 5	FT	DX	Welding UV-IR	2%	5 3M 1 FT	
Maxim Ballistic Bronze	13300-99999	PC BRonze	FT	DX	Solar Blue	58.1%	5-3.1 3M 1 FT	
Maxim Ballistic Clear	13296-00000	PC Clear	FT	DX	UV	92%	2C-1.2 3M 1 FT	
Maxim Amber	13300-99999	PC Amber	FT	DX	UV Blue Light	94%	2-1.2 3M 1 FT	
Maxim Red	13300-99999	PC Vermillion	FT	DX	UV	14%	2-1.4 3M 1 FT	
Marcus Gronholm Clear	71462-00001	PC Clear	F	AS-AF	UV	92%	2C-1.2 3M 1 FT	
Marcus Gronholm Bronze	71462-00002	PC Bronze	F	AS-AF	Solar Blue	16%	5-3.1 3M 1 FT	
Marcus Gronholm Blue Mirror	71462-00003	PC Blue Mirror	F	Mirror	Solar Glare Yellow	16%	5-3.1 3M 1 FT	
Marcus Gronholm Large Size	71462-00004	PC Clear	F	AS-AF	UV	92%	2C-1.2 3M 1 FT	
Refine 300 Clear	71507-00000	PC Clear	FT	AS-AF	UV	92%	2C-1.2 3M 1 FT	
Refine 300 Bronze	71507-00001	PC Bronze	FT	AS-AF	UV	19%	5-3.1 3M 1 FT	
1100E Clear	71508-00000	PC Clear	FT	AS-AF	UV	92%	2C-1.2 3M 1 FT	
1100E Grey	71508-00001	PC Grey	FT	AS-AF	Solar Glare	12%	5-3.1 3M 1 FT	
1200E Clear	71509-00000	PC Clear	FT	AS-AF	UV	92%	2C-1.2 3M 1 FT	
1200E Grey	71509-00001	PC Grey	FT	AS-AF	Solar Glare	12%	5-3.1 3M 1 FT	
Fuel X2 Clear	71506-00000	PC Clear	FT	AS-AF	UV	92%	2C-1.2 3M 1 FT	
Fuel X2 Bronze	71506-00001	PC Bronze	FT	AS-AF	UV	12%	5-3.1 3M 1FT	
Fuel X2 Red Mirror	71506-00002	PC Red Mirror	FT	AS-AF	UV	16%	5-3.1 3M 1 FT	
BX Clear	11380-00000	PC Clear	FT	AS-AF	UV	92%	2C-1.2 3M 1 FT	
BX Grey	11381-00000	PC Grey	FT	AS-AF	Solar	16%	5-3.1 3M 1 FT	
BX Readers +1.50	11374-00000	PC Clear	FT	AS-AF	UV	92%	2C-1.2 3M 1 FT	
LED Light Vision	11356-00000	PC Clear	FT	AS-AF	UV	92%	201.2 3M 1 FT	
Goggles								
MAXIM Hybrid	13330-00000	PC Clear	FT	DX	UV	92%	2C-1.2 3M 1 FT	
2890 Comfort Goggle	2890	PC Clear	BT	AS-AF	UV	86%	2C-1.2 3M 1 K N BT	
2890 Comfort Goggle	2890A	Acetae	FT	AS-AF AF	UV	89%	2C-1.2 3M 1 K N B1	
2890A Conflort Goggle	2890A 2890S	PC Clear	BT	AF AS-AF	UV	89%	2C-1.2 3M 1 K N BT	
				AS-AF AF	UV			
2890SA Comfort Goggle	2890SA	Acetate	FT			89%	2C-1.2 3M 1N FT	
Fahrenheit	71360-00001	PC Clear	B	AS-AF	UV	92%	2C-1.2 3M 1 BT	
Fahrenheit for Helmet	71360-00007	Acetate	B	AS-AF	UV	92%	2C-1.2 3M 1 B 9	
Fahrenheit T-N-Wear	71360-00003	Acetate	В	AS-AF	UV	92%	2C-1.2 3M 1 B 9	

1 - MECHANICAL WORK Grinding, drilling, stone cutting, maintenance... RISKS: Impact, dust

2 - OUTSIDE WORK Gardening, road works, building site work, shooting... RISKS: Impact, glare, UV

**3 - DRIVER** Fork lift truck, heavy plant, HGV, PSV... RISKS: Glare, UV

4 - CHEMICAL APPLICATION Laboratory, painting, general surgury... RISKS: Liquid splash (acid, alkalis), infected blood

Special field of use	Mechanical work	Outside Work	Driver	Chemical Application	Metallurgy	Surface Inspection	Welding	3M <sup>™</sup> Eyewear
								Overspectacles
	Х				Х			2800 Clear
	Х	Х				Х		2802 Yellow
		Х					Х	2805 Shade 5.0
								Spectacles
	Х				Х			2820 Clear
		Х	Х					2821 Grey
	Х	Х						2822 Amber
	Х	Х						2720 Clear
		Х	Х					2721 Grey
	Х	Х						2722 Yellow
	Х	Х						Tora Clear
		Х	Х					Tora Bronze
	Х	Х				Х		Tora Amber
	Х	Х						2840 Clear
		Х	Х					2841 Grey
	Х	Х				X		2842 Yellow
		Х	Х					2844 1/0
							Х	2845 Shade 5.0
	Х	Х				x		2846 Red-Orange Tint
	X	X			x			Solus Clear AS
	<i>N</i>	X	Х		~			Solus Amber
		A	~					Solus Bronze
		Х	Х					Solus I/O
 		X	X					Solus Red Mirror
	Х	X	^		X			Maxim Blk Adj Clear
 	^	Λ			^		X	Maxim Blk Welding Shade 5.0
							~	Maxim Bik Welding Shade 5.0 Maxim Ballistic Bronze
	Х	Х			Y			
	^	Å			X			Maxim Ballistic Clear Maxim Amber
 	Y	Y						Maxim Red
 	X	X	V					Marcus Gronholm Clear
 		X	X					Marcus Gronholm Bronze
	Х	X	Х					Marcus Gronholm Blue Mirror
 	Х	Х						Marcus Gronholm Large Size
					X			Refine 300 Clear
		Х	Х					Refine 300 Bronze
	Х				X			1100E Clear
	Х	Х	Х					1100E Grey
	Х				Х			1200E Clear
	Х	Х	Х					1200E Grey
	Х				X			Fuel X2 Clear
	Х	Х	Х					Fuel X2 Bronze
	Х	Х	Х					Fuel X2 Red Mirror
	Х	Х			Х			BX Clear
		Х	Х					BX Grey
	Х				х	Х		BX Readers +1.50
	Х	Х						LED Light Vision
								Goggles
3	Х			х				MAXIM Hybrid
3,4,9	Х							2890 Comfory Goggle
3.4				Х				2890A Comfort Goggle
3,4,5,9	Х							2890S Comfort Goggle
3,4,5				X				2890SA Comfort Goggle
3.4	Х							Fahrenheit
3,4,9	Х			Х	Х			Fahrenheit for Helmet
3,4,9	Х			Х	Х			Fahrenheit T-N-Wear

5 - METALLURGY

6 - SURFACE INSPECTION Quality control, Wood lamp, curing... RISKS: Ultraviolet, Blue light Furnace works, casting control, mould maintenance... RISKS: Impact, dust, infrared, molten metal, glare

7 - WELDING Welders assistant, brazing, gas welding, oxy-cutting... RISKS: Ultraviolet, glare, infrared, sparks

For additional eyewear options, please see our Eye Protection Catalogue.

# Built for protection Designed for COMFORT



### **Protective Coveralls by 3M**

3M has a select range of high quality stylish protective coveralls offering breathable comfort and protection you can rely on. The range provides peace of mind for effective use and protection against many industrial hazards.

### Main Features

- + Elasticated Hood, Waist and Ankles for convenient safe wear and freedom of movement
- + Two-way zip for convenience with storm flap for extra protection from contaminants
- + Gusset for increased robustness (4530 and 4540+ protective coveralls only)
- + Knitted cuffs for increased wearer comfort (excluding 4520)
- + Anti-static treatment
- + Coveralls by 3M contain no components made from natural rubber latex or silicone
- + Sizes: from M to XXL

### Table of Symbols

Symbol	Title/Aspect	Standard number
Ľ	Protective clothing – chemical	
	Type 6 – protective performance against liquid chemicals (whole suit, reduced spray)	EN 13034
	Type 5 – protective performance against solid airborne particulates	EN ISO 13982-1
	Type 4 – protective performance against liquid chemicals (spray tight)	EN 14605
	Protective Performance - Infective agents	EN 14126
<u>Ly</u>	Protective performance against radioactive particulate contamination	EN 1149
	Protective Clothing – Electrostatic properties – surface resistivity	EN 1073-2
(the second seco	Protective Clothing – Heat and Flame	EN 533 (Index 1)



# 3M<sup>™</sup> Protective Coveralls

# 3M<sup>™</sup> 4520 Protective Coverall

The 3M 4520 lightweight protective coverall is made of breathable material technology. This protective coverall offers CE Category III, Type 5/6 protection against dust and limited liquid chemical splash. With elasticated hood, waist, cuffs and ankles, and a two-way zip, comfort, convenience and freedom of movement is ensured.

### **Typical Applications**

- Light duty Maintenance and Repair
- + Insulation Laying
- + Farming/Abattoirs
- + Construction Work

### + Woodworking

+ Metal Grinding/ Polishing

Features and Benefits:

### **Premium Protection**

- + Good protection against dust and limited liquid chemical splashes (Type 5/6)
- + Offers protection against radioactive particulate contamination (EN 1073-2)

### Comfort

- Breathable material (SMMMS) for reduced heat stress
- + Extremely Lightweight material
- Elasticated hood, waist and ankle for good fit
- + 2-Way zip for extra convenience

### Performance

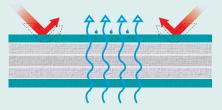
- + Anti-static treatment
- + Available in 4 sizes
- 3-piece hood design for better manouvrability and fit with other protective equipment

3M<sup>™</sup> 4520 Protective Coverall Type 5/6 Colour: white with green back panel CE Category III Sizes: M, L, XL, XXL



#### Latest Material Technology

With 3 layers of melt blown polypropylene in-between 2 layers of spun bond polypropylene, the 4520 material is specially designed to maximise breathability and air flow, yet provide good protection against dust and liquid chemical splash.









# 3M<sup>™</sup> 4530 Protective Coverall

Made of a soft and breathable material and with further features, including knitted cuffs and a 2-way zip, the 3M 4530 protective coverall offers the user excellent comfort. Additionally, unique to the product is a flame retardant coating offering limited protection against flame and heat.

### **Features and Benefits:**

#### **Premium Protection**

- + Good protection against dust, and limited liquid chemical splashes CE (Type 5/6)
- Offers limited protection against flame and heat (EN533 Index 1/0, must be worn over Index 2 or 3 garment)

### **End User Comfort**

- + Breathable material \_\_\_\_\_\_ (SMMS) for reduced heat stress
- + 2-Way zip for extra convenience
- + Resealable zip flap for additional protection
- Knitted cuffs for increased \_\_\_\_\_ wearer comfort
- + Elastic hood, waist and ankle for excellent fit
- + Good compatibility with other forms of personal protective equipment \_\_\_\_\_

### Performance

- + Anti-static treatment
- + Available in 4 sizes
- 3-piece hood design for better manouvrability and fit with other protective equipment



### **Typical Applications**

- + Food Processing
- + Woodworking
- + Welding
- + Insulation Laying
- + Metal Grinding/Polishing
- + Light duty Maintenance





#### Fabric Material

SMMS (Spun bond, Melt blown, Spun bond polypropylene)



4 layers of Polypropylene (Spun bond, Melt blown, Melt blown, Spun bond)

The combination of four layers of polypropylene brings increased protection and breathability. The melt blown is inserted with hot air and acts as a chemical barrier. The other two layers make the coverall soft and breathable.





# 3M<sup>™</sup> 4540+ Protective Coverall

The 3M 4540+ Protective Coveralls utilise a new combination of fabrics, reducing the weight of the coverall, while enhancing its softness, drape over the body and the overall comfort. With a further improved low-linting performance, the 3M 4540+ offers European CE Type 5/6 protection against hazardous particulates and limited liquid chemical splash. Comfort is further enhanced with a lighter weight breathable back-panel to aid air flow around the body.

### Typical Applications

- + Paint Spraying
- + Powder Coating
- + Resin Application
- + Light-Duty Cleaning and Maintenance
- + Pharmaceutical Processing

### **Features and Benefits:**

### **Premium Protection**

- Excellent barrier against dry particles and \_\_\_\_\_ limited liquid chemical splash (CE Type 5/6)
- + Laminated microporous material with low-linting properties\_\_\_\_\_
- + Offers protection against radioactive particulate contamination (EN 1073-2)

### Comfort

- Back panel made of lightweight, breathable material for improved air circulation and reduced heat stress
- + 2-Way zip for extra convenience
- + Sealable zip flap for additional protection
- + Knitted cuffs for increased wearer comfort
- + Elastic hood, waist and ankle for comfortable fit
- + Reinforced gusset for added robustness.

### Performance

- + Anti-static treatment
- + Low-linting
- + Available in 4 sizes
- + 3-piece hood design for better manouvrability and fit with other protective equipment.





3M™ 4540+ Protective Coverall Type 5/6 Colour: white with blue back panel CE Category III Sizes: M, L, XL, XXL



### **Fabric Material**

New laminated microporous fabric material used in the  $3M^{\text{TM}}$  4540+ Protective Coveralls:

The non-woven base gives robustness to the film and a soft, comfortable wear.

The material has been engineered to reduce material weight by up to 20% while maintaining good protective performance. The new fabric is softer, lighter and more comfortable for the wearer. This fabric is low-linting.



# 3M<sup>™</sup> 4565 Protective Coverall

Made of a high-quality laminated fabric, the 3M 4565 protective coverall features taped seams for increased protection against fine particles and liquid chemical sprays. It has also been tested to EN14126 for biological protection against infective agents.

### **Typical Applications**

- + Asbestos handling / removal
- + Chemical mixing and preparation
- + Protection against infective agents (Disease control)
- + Pharmaceutical manufacture







# 3M<sup>™</sup> 450 Overboots

The 3M 450 Overboots are offered to the market as an accessory to protect footwear and clothing. They are made from a laminated polypropylene non-woven material, with a sole designed to reduce the risk of slipping. They come elasticated at the calf with material ties to ensure a good fit.



3M™ 450 Protective Overboot Colour: white Accessory Sizes: Universal

Although the 3M 450 overboot upper is manufactured from a fabric which has liquid splash and dust barrier properties (suitable for Type 5/6), it is not intended as primary protection to the foot, and therefore it is not CE marked as Personal Protective Equipment.

Elasticated Hood, Waist and Ankles



Two-Way Zip



**Knitted Cuffs** 





# **Choose the Right Protective Coverall**

3M <sup>™</sup> Product Selection	4520	4530	4540+	4565
Some Typical Applications				(C)
Applications: Protection against Particles				
Inspection of areas contaminated with asbestos				
Asbestos stripping				
Insulation laying				
Woodworking				
Welding (worn over an EN 533 Index 2 or 3 garment)				
Metal grinding/polishing				
Fine coal dust in power plants				
Animal feeding/examining				
Working with fungal spores, bacteria and powders				
Wastewater treatment				
Radioactive particulate dust				
Applications: Protection against Liquids				
Light-duty building cleaning				
Medium-duty industrial cleaning work				
Machine/vehicle maintenance and cleaning				
Spray painting (non-isocyanate paints)				
Tank cleaning and maintenance				
Dairies & tending to animals				
Infective agents (contact with blood)				

This guide is only an outline. It should not be used as the only means for selecting protective clothing. Details regarding performance and limitations are set out on the packaging and user instructions. Before using any protective clothing, the wearer must read and understand the user instructions for each product. Specific country legislation must be observed. If in doubt, contact a safety professional or 3M – www.3M.eu/safety. Always check the compatibility of the suit material before selection. Please note that the personal protective equipment (PPE) shown highlight some of the products which may be considered. Sections of the most appropriate PPE will depend on the particular situation and should be made only by a competent person knowledgable of the actual working conditions and the limitations of PPE.

Product/Protection Level	Aspect	Standard	4520	4530	4540+	4565
			Â.			(A)
	Chemical Protective Clothing	EN 340	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
	Type 6 Splash Tight	EN 13034				
	Type 5 Dust Tight	EN ISO 13982-1	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
	Type 4 Spray Tight	EN 14605				
	Infective Agents	EN 14126				$\checkmark^{\star}$
<u>h</u>	Electrostatic Properties	EN 1149				
	Particulate Radioactive Contamination	EN 1073-2	$\checkmark$		$\checkmark$	$\checkmark$
() i	Heat and Flame	EN 533 (Index 1)				





# Emergency Response Solutions

### **Emergency Response**

Emergency Response personnel have unique needs from the Personal Protective Equipment (PPE) they wear which are different from industrial workers:

- + they are in emergency rather than routine situations
- + there may be a wide range of hazards against which they need protection
- + they may not have the luxury of frequent training and experience in the PPE

Therefore, they often need PPE specifically designed to meet these needs.



# Purpose designed PPE solutions protecting you in the harshest environments

Introducing the 3M<sup>™</sup> JS-Series Chemical and Respiratory Protective Suits (CRPS) with temperature and altitude correction technology. This technology allows you to use these systems in almost all environments and geographies.

Type 3 suits are designed to provide workers in Emergency Response environments with a high level of personal protection against a broad range of industrial chemicals and other agents found in Civil Emergency situations. These systems combine highly comfortable Type 3 protective suits with respiratory protection from the industry proven 3M<sup>™</sup> Jupiter<sup>™</sup> JP-ER-03 Powered Air Purifying Turbo.

### 3M<sup>™</sup> JS-Series CRPS Features

There is no compromise on fit or comfort thanks to the purposedesigned suit and turbo combination system. The loose-fitting hood design provides full coverage and protection without the need for a tight-fitting facepiece meaning that the suit can be used by people with facial hair, face-fit testing is not required, training needs are reduced and there is a reduced sense of claustrophobia. The clear, wide viewing visor provides an excellent field of view and better focus on the task in hand. 3M's unique 'Head-Up-Display' gives the user constant feedback from the system in terms of visual and audible warnings and alarms.

### 3M<sup>™</sup> Jupiter<sup>™</sup> Features

Software programmed to alert you every hour the turbo has been running with an audible beep allows you to get on with the job and not worry about air flow calibration. There are a full range of Jupiter<sup>™</sup> filters available to suit the majority of applications and hazards. The Jupiter<sup>™</sup> turbo offers an ideal air supply with the minimum air flow rate of 150 liters per minute.



# 3M<sup>™</sup> Emergency Response Solutions



# 3M<sup>™</sup> JS-330 Series Chemical and Respiratory Protective Suits (CRPS)

The 3M<sup>™</sup> JS-330 Series of Type 3 Suits are designed to provide Emergency Response workers with a high level of personal protection against a broad range of industrial chemicals and other agents found in Civil Emergency situations. These systems combine robust highly comfortable Type 3 suits with respiratory protection from the industry proven 3M<sup>™</sup> Jupiter<sup>™</sup> JP-ER-03 Powered Air Purifying Turbo.

### Features, Advantages and Benefits

- + Approved to EN12941 TH3, with a Nominal Protection Factor (NPF) of 500
- Additional testing to EN1073-1 gives and NPF of 2000 meaning that these suits can be used to provide respiratory protection up to 2000 times the Threshold Limit Value (TLV)\*
- New comfort back harness allows for easier driving of vehicles and ensures ideal weight distribution of x turbo and filters.
- Type 3 Protective Suit with taped seams for protection against liquid chemical hazards (tested under jet pressure)
- Factory calibrated turbo to allow you to just get on with the job and not worry about air flow calibration
- Integrated Nitrile gloves welded to the suit so you don't have to spend time worrying about getting an effective seal.
- 3M's unique air exhaust positioning means air must pass over the whole body to exit the suit through an active elastomeric exhaust valve. This provides a cool airstream which improves comfort, reduces heat stress, allows for better focus on tasks and for longer wearing times.
- Integrated sock (same material as suit) to allow wearer choice in footwear and added security of boot flap to help prevent contamination of the footwear.



#### **Key Applications**

- + Mass decontamination exercises evacuations
- + Hospital first receivers
- + Emergency Medical Service (Ambulance)
- + Casualty transport
- + Triage
- + Hazardous waste remediation
- + Asbestos abatement
- + Petrochemical applications
- + Liquid chemical and solvent handling



+ 'Head-Up-Display'.

\* Additional testing, to EN 1073-1:1998 demonstrated that a Total Inward Leakage (Respiratory Zone of less than 0.05% was achieved, relating to a Nominal Respiratory protection factor of 2000 for all suits. Inward leakage of whole suit design meets the requirement of the suit Type 5 Test, with Limn 82/90 =30% and Ls, 8/10



## 3M<sup>™</sup> JS-Series Chemical and Respiratory Protective Suits (CRPS)

### $3M^{{\scriptscriptstyle\mathsf{T}}{\scriptscriptstyle\mathsf{M}}}$ Filters and Accessories

Item	Description	Pack Qty
Suits		
JS-330 SUIT	Type 3 broad range chemical protection suit	1
JS-470 SUIT	Type 4/5 Lightweight suit, without integrated gloves	4
JS-470G SUIT	Type 4/5 Lightweight Suit with integrated gloves	4
Turbo		
JP-ER-03 Turbo Kit	Turbo, Backpack, Head-Up Filter Retainers Display and Breathing Tube	1
Batteries		
BAT-22	Single Use 4-Hr Battery	1
007-00-63P	Rechargeable 4-Hr Battery	1
007-00-64P	Rechargeable 8-Hr Battery	1
Filters		
450-00-25P2	Particulate P R Filters (Pairs)	12
453-00-25P2	A2P R Filters (Pairs)	6
453-09-25P2	A2BEK1P R Filters (Pairs)	6
453-16-25P2	K1P R Filters (Pairs)	6
456-18-25P2	ABE1P R Filters (Pairs)	6
JFR-85	ABEK2P R (Pairs)	6
Spares & Accessories		
BPK-01	Back Pack	1
008-00-42P3	Breathing Tube	3
003-00-58P	Intelligent Battery Charger	1
003-00-59P	Intelligent 10-Station Battery Charger	1



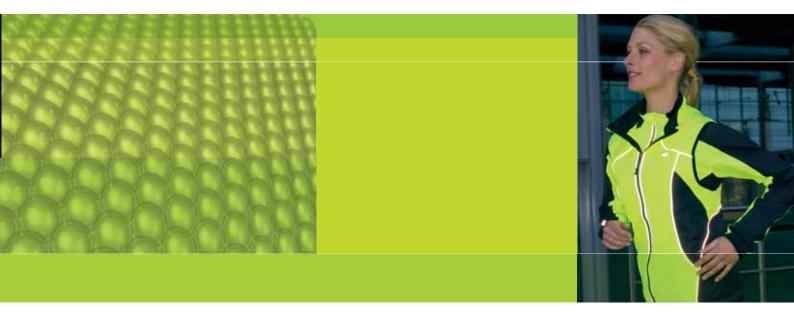
There are uses, environments and chemicals for which these garments and/ or fabrics are unsuitable. It is the responsibility of the user to review available data and verify that the garment and/or fabric is appropriate for the intended use and meets all specified government industry standards.



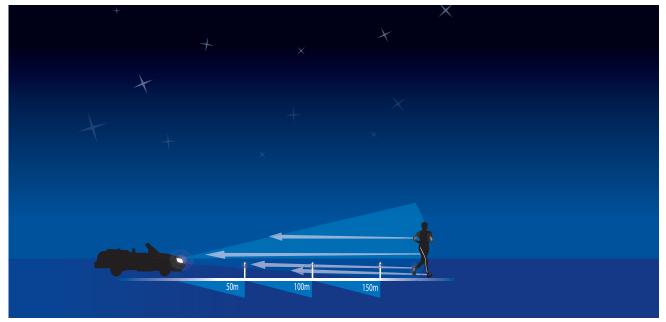


### Visibility Solutions by 3M

Many aspects of daily life are impacted and benefit from the inventions and innovations of 3M employees. We will illustrate some of the possible uses of these innovative products and how they might contribute to the increased visibility of you, your family or employees. One important product we want to focus on is 3M<sup>™</sup> Scotchlite<sup>™</sup> Reflective Material. Whether at work, at play or during sporting activities, Scotchlite reflective material helps to increase the visibility of the wearer during daytime, at night or under low light conditions such as during bad weather.



If people at work or in traffic can be seen earlier, vehicle drivers can take evasive action helping to prevent or reduce the risk of accidents.



Visibility increases safety



# 3M<sup>™</sup> Scotchlite<sup>™</sup> Reflective Material



# The Evolution of Visibility



### **Retro-Reflective Technology**

Combining versatility, functionality and fashion, 3M<sup>™</sup> Scotchlite<sup>™</sup> Reflective Material makes use of a technology that is known as retroreflection. The material is easy to process and there are many creative possibilities. Scotchlite reflective material can be sewn onto garments or simply applied using a heat transfer process. Millions of small glass spheres or micro-prisms reflect the incident light and focus it back towards the original light source. The obvious advantage is that the person in the light can be seen better and sooner thanks to the retro-reflective effect, so that the vehicle driver has extra time to react and many accidents can thus be avoided.

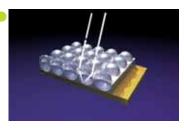
Two different technologies are used in our range of retro-reflective materials.

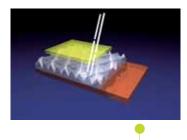
### **Glass Bead/Lens Technology**

Scotchlite reflective materials incorporating glass bead technology utilise millions of high performance glass beads that reflect light very effectively from all directions due to their spherical nature.

### **Features and Benefits:**

- Very comfortable to wear. The reflective material forms an integral part of a garment, providing freedom of movement, easy storage and folding
- Includes a range of materials that are able to withstand high temperature washing up to 92°C
- + Can be dry cleaned and ironed
- + Cost effective
- Available in sew-on, heat-applied and self adhesive options





### **Microprismatic Technology**

Scotchlite reflective material High Gloss Series incorporates retro-reflective microscopic prisms formed on a polymeric film to create a bright reflective appearance on garments and accessories.

### **Features and Benefits**

- + Is available in different colours
- + Can be washed at 60°C up to 75 times.
- + Provides an attractive, high gloss finish.
- + Can be sewn or welded onto garments.



## **Workwear Reflective Solutions**

Visibility by day and night is an important aspect for workers who are exposed to dangers during their daily work.

3M<sup>™</sup> Scotchlite<sup>™</sup> Reflective Material can be used in many different occupational fields, such as firefighting, rescue services, road construction and garbage collection. It improves visibility and safety in low light situations and at night. The superior quality and performance of Scotchlite reflective materials ensure lasting functionality for many years; even under harsh conditions, our products will not let you down.

### Applications

- + Firefighting
- + Rescue Services
- + Road Construction
- + Garbage Collection

The wide range of different Scotchlite reflective materials is designed to provide enhanced visibility, improving the safety of the wearer, without compromising on the functionality or performance of the garment on which they are used. As end-users demand additional properties or wash durability from their high-visibility garments, such as flame resistance, industrial laundrability or chemical resistance, they can be confident that there's a Scotchlite reflective material solution for their application.



With the introduction of 3M<sup>™</sup> Scotchlite<sup>™</sup> Reflective Material – 5500 Series Comfort Trim, 3M is enhancing its commitment to worker safety and comfort. The unique design of the segmented trim provides improved moisture vapour transmission, compared to solid trims, so that workers can stay dryer and cooler, while the increased flexibility makes garments more comfortable to move in.



# 3M<sup>™</sup> Scotchlite<sup>™</sup> Reflective Material



# **Corporate Fashion Reflective Solutions**

Workwear should not only be functional, but also highly visible. Occupational garments that have been designed to include reflective material help the wearer to be easily seen in traffic and other danger zones, as well as during normal work activities.

### **Features and Benefits**

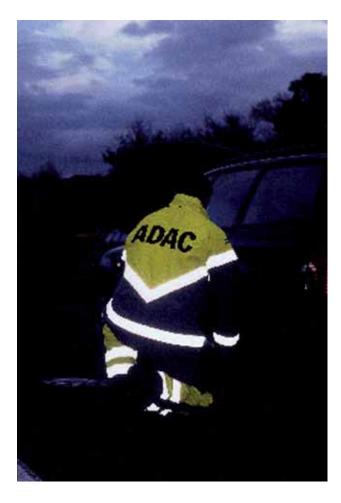
+ Functional

+ Highly visible

+ Necessary to be seen in traffic and other danger zones

In an environment that is full of turmoil and reflected light,

3M<sup>™</sup> Scotchlite<sup>™</sup> Reflective Material incorporated into work wear and uniforms helps to make personnel more visible around the clock and also in poor weather conditions. During heavy snowfall, dense mist, etc. light is typically diffused and might not reach the reflective material.



As an example, airline operations have increased dramatically in the last few decades, meaning more staff, vehicles and equipment moving around the airport and the surrounding areas, increasing the level of risk of accidents.



Airports operate 24 hours a day, 7 days a week under all weather conditions. It's a working environment that involves many hazards from moving vehicles and the risk of an accidents increases in poor light, such as at dusk or in bad weather. Airport staff working outside are not always sufficiently visible.



# **Fashion & Lifestyle Reflective Solutions**

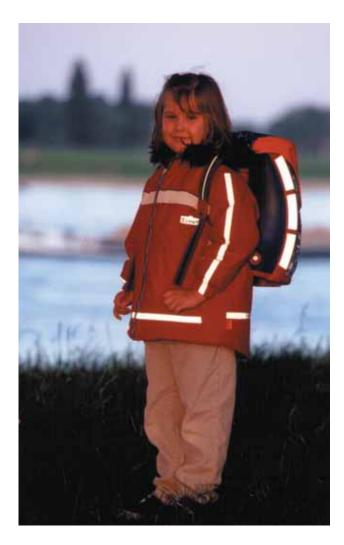
In road traffic, pedestrians such as schoolchildren, seniors and joggers, cyclists and horse-riders are especially vulnerable. The safety of these groups can be improved with 3M<sup>™</sup> Scotchlite<sup>™</sup> Reflective Material, because they can be seen better and sooner by car drivers, thus helping to prevent accidents.

### Application

- + On-road traffic
- + Pedestrians
- + Seniors
- + Children
- + Athletes e.g. runners
- + People on bicycles

We pay particular attention to schoolchildren who are getting their first experience in traffic. How easily they are recognized depends on good visibility. For drivers travelling at 50 km/h, improving recognition time by only 0.5 seconds gives an extra 7 metres in which to stop.

Scotchlite reflective material can be easily integrated into daily fashion wear, and well-known fashion designers all over the world profit from this capability. Scotchlite reflective material is not only highly visible, but can also be used to make fashionable, trendy design elements.





Scotchlite reflective material is not only functional, but also a key design element in outdoor fashion today.

# 3M<sup>™</sup> Scotchlite<sup>™</sup> Reflective Material



# **Product Overview**



8940	Silver	against abrasion and chemicals	
8986 NFPA	Red-orange	Fabric backing: 100% cotton, flame resistant, fluorescent and reflective	
8987 NFPA	Lime-yellow	Fabric backing: 100% cotton, flame resistant, fluorescent and reflective	

### **Fire Coat Trims**

9686	Silver-red-orange	Aramid fabric, flame resistant, fluorescent red-orange, silver reflective centred stripe	
9687	Silver-lime-yellow	Aramid fabric, flame resistant, fluorescent lime-yellow, silver reflective centred stripe	



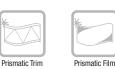


Police



Vest

Consume



Converting











Footwear

Industrial Wash 75°C

130

Rescue



### Product Colour F

### **Transfer Films**

5510	Silver	Segmented trim for occupational garments, improved moisture vapour transmission, comfort and wash performance	
5807	Silver	Custom-cuttable for reflective graphics and logos, heat-activated transfer film	
8710	Silver	Heat activated adhesive, stretchable	
8711	Silver	Heat activated adhesive, elastic, can be printed directly	
8725	Silver	Heat acitvated adhesive, improved resistance to abrasion and chemicals, wash durability	
8725LL	Silver	Heat acitvated adhesive, improved resistance to abrasion and chemicals, wash durability, without paper liner	
8726	Silver	Heat acitvated adhesive, improved resistance to abrasion and chemicals, wash durability	
8726LL	Silver	Heat acitvated adhesive, improved resistance to abrasion and chemicals, wash durability, without paper liner	
8765	White	Heat activated adhesive	
8787	Lime-yellow	Heat activated adhesive, fluorescent lime-yellow combined performance material	

### **Marking Films**

8850	Silver	Pressure sensitive adhesive (PSA), non-washable

### High Gloss Trims

7160	White	Ready to be sewn on, can be printed	
7180	Silver-grey	Ready to be sewn on, can be printed	
7187	Lime-yellow	Ready to be sewn on, coloured retroreflection, can be printed, fluorescent and reflective	
7196	Red-orange	Ready to be sewn on, coloured retroreflection, can be printed, fluorescent and reflective	

### **High Gloss Films**

6260/ 6260R	White	Sewing, welding, cutting, can be printed	
6287/ 6287R	Lime-yellow	Sewing, welding, cutting, coloured retroreflection, can be printed, fluorescent and reflective	
6296/ 6296R	Red-orange	Sewing, welding, cutting, coloured retroreflection, can be printed, fluorescent and reflective	

### High Gloss Sparkle Films

6560 White Sewing, welding, cutting, can be printed, sparkling appearance	
---	--





### 3M<sup>™</sup> Thinsulate<sup>™</sup> Thermal Insulation

Thinsulate insulation works by trapping air molecules between you and the outside. The more air a material traps in a given space, the greater is its insulating value. As the microfibres in Thinsulate insulation are so fine, they trap more air in less space, which naturally makes it a better insulator. So we haven't repealed the laws of nature with our thin insulation; we've simply obeyed them better... to your advantage.



# Thinsulate<sup>™</sup> Insulation



# **The Ultimate Insulation**

The original, warmth-without-bulk insulation,  $3M^{TM}$  Thinsulate<sup>TM</sup> Thermal insulation is a non-woven fabric which, when incorporated into outer garments and accessories, provides more than one and a half times the warmth of down.

Thinsulate insulation is one of the warmest clothing insulations on the market yet still thin enough to allow complete freedom of movement. Thin, light and warm, this also makes Thinsulate insulation the perfect choice for insulated footwear.

Thinsulate insulation is very soft and compressible. This makes it flexible enough for accessories like hats and gloves, which are difficult to insulate effectively without restricting movement or compromising fit.

## Comfort, Warmth and Quality – Thinsulate insulation lives up to its promises:

Using a thermal imaging camera clearly demonstrates the performance of the Thinsulate insulation material, keeping the body comfortably warm.





### Comfort, Warmth, Quality

Our comprehensive product range is designed to meet the individual requirements of our customers around the world:

### 3M<sup>™</sup> Thinsulate<sup>™</sup> Fabrics

### **Thinsulate Insulation Type C**

- + Thinner and lighter compared to conventional insulation
- + Greater comfort and flexibility
- + Slimmer profile for more freedom of movement
- + High durability and compression resistance

### **Thinsulate Insulation Type R**

- + Contains 50% recycled fibres
- + Designed for outerwear, sportswear, gloves and accessories
- + Thinner and lighter compared to conventional insulation, enhancing freedom of movement
- + High durability and compression resistance

### **Thinsulate Insulation Type P**

- All-rounder solution mid loft and soft with excellent product features
- + Washability up to 60 °C
- + Durability and easy-care

### Thinsulate Insulation Type FR (Flame Resistant)

- + Excellent mid loft for flame resistant outerwear
- + Use it in combination with ISO 14116 index 3 fabrics (or EN533 index 3 fabrics)
- Withstands repeated home and industrial hot water washings or dry cleanings.
- High durability, especially under demanding washing conditions

### **Thinsulate Insulation Type B**

- + Ultimate performance in cold weather boots and shoes
- + Unique ability to retain warmth even when compressed
- Warm, thin and light the most important features for high quality boots that protect your feet
- + High durability

### Thinsulate Insulation Type TIB

- + For bedding and sleeping bags
- + High loft : extremely warm and light
- + Excellent washability
- + "Down-like" touch and feel



### **Occupational workwear**

Application			Тур	e C					Туре Р			٦	Type FF	7		Тур	e B		Т	ype TI	В
	40	70	100	150	200	250	60	80	100	120	150	120	150	200	100	200	400	600	100	120	200
		•	•	•	•	•		•	•	•	•	•	•	•							
,	•	•	•	•					•		•	•									
<u></u>	•	•																	•	٠	
and the second se															•						
																				•	

### **General and Performance Wear**

Application				Tyr	e C					Type F	)			Typ	e R			Tyr	be B		г	Type TI	R			
Аррисации		40	70			200	250	60	80	100		150	70	100		200	100		400	600		120		<u>í</u>		
•1 /		10	•	•	•	•	200		•	•		•	•	•		•	100	200	100	000	100	120	200		No. 1	
		•	•					•	•	•			•												1	1
			•	•	•	•		•	•	•	•	•	•	•	•	•					2			٩.	•	
~~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	1	•	•	•									•	•				Ţ	hinsu	late			1			
				•	•				•	•	•			•	•								1			
- S								•					•	•								No.				
	1		•	•									•	•												
		•	•	•				•	•				•	•										2		
-F			•					•	•				•													
	1	•		•									•	•							•	•				
		•	•	•				•	•	•			•	•												
â Î			•	•	•				•	•	•	•	•	•	•							(				
																	•	•	•	•						
																					•	•	•			
																					•	•	•			
Amplications						•										0	a la la									

### Applications

- + Ski and sports clothing
- + Leatherwear
- + Protective clothing and uniforms
- + Fashion
- + Shoes and gloves
- + Sleeping bags
- + Bedding
- + Headgear

### **Convincing Arguments**

- + Lightweight
- + Breathable and retains warmth even when damp
- + Hard wearing and easy to look after
- + Awarded with the Oeko-Tex label
- + High standard of quality

### Certainly to your benefit

- + Well known brand name
- + Global supply
- + Support in sales and marketing
- Further development based on latest research results from the 3M laboratories





### Sorbents by 3M

3M<sup>™</sup> Sorbents can be used in a wide variety of applications ranging from simple maintenance to emergency spill cleanup. Sorbents help to ensure your workplace is kept clean and safe and reduce damage to the environment. 3M Sorbents are designed to be used for specific jobs and materials. Some can be used for general maintenance applications while others are designed to handle petroleum or chemical spills and clean-up.



# 3M<sup>™</sup> Sorbents



# Different Types of Sorbents

3M<sup>™</sup> Maintenance Sorbents – ideal for absorbing oil and other industrial fluids cleanly, safely and efficiently.

3M<sup>™</sup> Oil Sorbents – for absorbing oil not water. Being hydrophobic (water repellent) they are ideal for absorbing oil from areas where water may also be present.

3M<sup>™</sup> Chemical Sorbents – an ideal solution for hazardous spill control. They provide very high absorption capacities and are suitable for absorbing a very wide range of liquids - even aggressive acids and alkalis.

### **Different Formats of Sorbents**

Sorbents by 3M are available in a variety of formats, so you can choose the format that meets your needs.

### Rugs

Ideal for use in walkways near leaky machines. The rugs are highly durable and tear resistant, withstanding heavy foot-traffic and soaking up liquids without breaking up.

### **Minibooms – Pillows**

Ideal for placing around the base of leaking machinery/equipment to contain and absorb oils and cutting fluids.

### **Multi-Format**

All your sorbent needs from one box. This versatile product is four formats rolled into one.

### **Pads and Rolls**

Designed to be used in and around the work area to catch leaks and drips, pads are highly absorbent and simple to use.

### **Hazardous Spill Response Kits**

3M<sup>™</sup> Chemical Spill Kits each contain a carefully selected variety of chemical sorbents. These convenient kits assist with providing fast and effective containment and clean-up of hazardous spills.

### **Tanker Spill Response Kits**

The modern and effective way to control and clean up spills resulting from liquid fuel deliveries.

### Symbol Key

Throughout this section of the brochure you'll notice the symbols shown below. These symbols indicate which sorbents can and cannot be used with different fluids.



### **Multi-Format Sorbents Application Guide**











138







Open



## **3M<sup>™</sup> Maintenance Sorbents**

For leaks and drips of non aggressive fluids. 3M Maintenance Sorbents are ideal for absorbing oil and other industrial fluids cleanly and efficiently. They are lightweight and very quick to deploy. They are long lasting and highly absorbent (up to 25 x their own weight) absorbing most fluids very quickly. 3M maintenance sorbents are not suitable for absorbing aggressive liquids. Maintenance sorbents by 3M are made from inert, synthetic fibres principally of polypropylene and polyester. They are available in a large range of formats and are lightweight and dust free. They have a high absorption capacity which minimises the amount of waste for disposal.

#### **Features and Benefits:**

- + Promotes a cleaner, safer working environment
- + Very easy to use and to retrieve
- + Reduces the risk of contamination of finished products
- + Reduces the risk of damage to valuable machinery
- + Significantly less waste to dispose of

#### **Applications:**

- Industrial machinery leaks, drips, spills and splashes of non-aggressive maintenance fluids
- + Wiping down oily tools and equipment
- + Tabletops and under work surfaces
- + Indoor vehicle/equipment parking areas -
- fork trucks, compressors, and lift equipment + Areas where an oily mist is problematic
- + Under oily machined metal parts while they drip off prior to packing and shipping



3M™ M-M1002 Maintenance Sorbent Mini-Boom

#### Other 3M<sup>™</sup> Maintenance Sorbents



3M™ M-F2001 Multi-Format Maintenance Sorbent



3M<sup>™</sup> M-N1001 Maintenance Sorbent Pillow



3M<sup>™</sup> M-A2002 Maintenance Sorbent Pad



3M™ M-B2001 Maintenance Sorbent Roll



3M™ M-G1001/M-G1301 Maintenance Sorbent Rugs

3M<sup>™</sup> M-R2001 Maintenance Sorbent Drum Cover, High Capacity Case

### **Product Overview**

Product	Number	Size (CM)	No./case	Case sorbency (litres)	Case weight (kg)
Multiformat	M-F2001	12 x 1520	3	119	8.2
Pads	M-A2002	40 x 52	100	142	6.4
Bolls	M-B2001	40 x 4600	1	117	5.9
RUIIS	M-B2002	96 x 4600	1	288	13.6
Drum Covers	M-R2001	56ø	25	72	3.6
Minipillows	M-N1001	18 x 38	16	32	3.3
	M-M1001	7.6ø x 120	12	45	5.5
Minibooms	M-M1002	7.6ø x 240	6	45	5.5
	M-M1003	7.6ø x 370	4	45	5.5
Rug (uncoated)	M-G1001	91 x 9100	1	120	25.0
Rug (coated)	M-G1301	91 x 3000	1	40	10.5

# 1<sup>™</sup> Sorbents



# 3M<sup>™</sup> Oil Sorbents

3M Oil Sorbents are an innovative range of highly absorbent products. Being hydrophobic or water repellent they are ideal for absorbing oil from places where water may also be present.

As with  $3M^{\mbox{\scriptsize TM}}$  Maintenance Sorbents, 0il Sorbents are available in a wide range of convenient formats - each designed to enhance spill management and maximise pollution control. Oil Sorbents are made from inert, synthetic fibres, principally polypropylene for 'T' oil sorbents and polypropylene and polyester for 'HP'. They are available in a wide range of formats and are lightweight and dust free. They have a high absorption capacity which minimises the amount of waste for disposal. HP antistatic products have a charge dissipating polypropylene scrim and are packaged in charge-dissipating film.

### **Features and Benefits**

- + Hydrophobic
- + Cost-effective as oil, not water, is recovered
- + Can be used outside as well as in-plant
- + Handy dispenser box for easy on-site use

### **Applications**

- + Controlling, cleaning up and recovering oil and petroleum based liquids from effluent discharge, streams, ponds, lakes, rivers, and other bodies of water
- + In-plant spills under leaking equipment and machinery in place of clay granules
- + In drains and sumps to collect petroleum products from runoff

### **Product Overview**

Product	Number	Size (CM)	No./case	Case sorbency (litres)	Case weight (kg)
	T151	53 x 39	200	150	8.5
04 4-	T156	53 x 39	100	135	7.5
	HP156	48 x 43	100	142	4.5
Sheets	HP-255	47cm x 47cm	50	124	5.0
	HP556 antistatic	48 x 43	100	142	4.5
	HP557 antistatic	96 x 86	50	238	9.0
	T100	96 x 4000	1	276	15.0
Rolls	T150	48 x 4000	1	138	7.5
	HP100	96 x 4400	1	276	9.0
Pillows	T30	18 x 38	16	32	3.3
FIIIOW5	T240	38 x 55	10	100	10.5
	T270	20ø x 300	4	260	22.0
Booms	T280	2 x 10ø x 300	4	152	11.0
	T270GA	20ø x 500	2	220	17.0
	T4	7.5ø x 120	12	45	5.5
Minibooms	Т8	7.5ø x 240	6	45	5.5
	T12	7.5ø x 370	4	45	5.5
Sweep	T126	48 x 3000	1	95	7.5
Particulate	T210	-	-	75	7.5
Multiformat	T-F2001	12 x 1520	3	119	8.2

#### 3M™ T-F2001 **Multi-Format Oil Sorbent**

3M T-F2001 and

As with all Multi-Format Products by 3M, Multi-Format oil sorbent combines the convenience and versatility of four sorbents in one. Offering high absorbency and rapid deployment, it can be used as a boom, pillow, pad or roll. With perforations every 40cm it allows you to select the length that you need, resulting in less wastage.

### Other 3M<sup>™</sup> Oil Sorbents



3M™ T100/T150 **Oil Sorbent** Roll

3M™ T151/T156 **Oil Sorbent** Sheets



**Oil Sorbent** Mini-Boom

3M™ T30 **Oil Sorbent** 

> 3M™ T126 **Oil Sorbent** Sweep

Pillow





3M<sup>™</sup> T270/T280 **Oil Sorbent** Boom





## 3M<sup>™</sup> Tanker Spill Response Kits



The modern and effective way to control and clean up spills, particularly those resulting from liquid fuel deliveries. The Road Traffic (Carriage of Dangerous Substances in Road Tankers and Tank Containers) Regulations 1992, require that during the delivery and unloading of petrol, a suitable quantity of absorbent material must be available as a contingency against spills. Tanker Kits by 3M can satisfy the above legislation ensuring a rapid and effective solution to spills of this nature.

#### **Features and Benefits**

- + Easily stowed in confined areas, e.g. behind the drivers seat
- + Immediately deployable
- + Two convenient sizes (3M<sup>™</sup> TSK15, absorbency 15 litres and 3M<sup>™</sup> TSK30, absorbency 30 itres)
- + Mini-booms for containment
- Easy to dispose of disposal bags and ties included
- + Absorbs solvents, oils and hydrocarbons



### 3M™ TSK 30 Tanker Spill Response Kit

### Product Overview

3M™ TSK 30 Kit	3M™ TSK 15 Kit
Contains:	Contains:
50 Sheets – 48 cm x 43 cm	25 Sheets – 48 cm x 43 cm
2 Minibooms – 7.5 cm x 1.2 cm	2 Pillows – 18 cm x 38 cm
1 Disposal bag and tie	1 Disposal bag and tie
1 Disposal guide and label	1 Disposal guide and label
Absorbency per kit: 30 litres	Absorbency per kit: 15 litres

### **Application and Directions for Use**



Small spills can be covered with the oil sorbent sheets.



seepage ensure they

are overlapped.

For larger spills, contain the spill by surrounding the liquid with oil sorbent minibooms. To prevent



Oil Sorbent Minibooms can also be used to prevent flow of spills into drains.

### Other 3M<sup>™</sup> Tanker Spill Response Kits

3M™ TSK 15 Tanker Spill Response Kit





Also use sheets to wipe off any contaminated surfaces.



Used sorbents should be placed in the temporary disposal bags provided and sealed with plastic tie.

# 3M<sup>™</sup> Sorbents



# **3M<sup>™</sup> Chemical Sorbents**

3M Chemical Sorbents are the ideal solution for hazardous spill control. Available in a wide range of formats – including our spill kits – they provide very high absorption capacities and are suitable for absorbing a very wide range of liquids – even aggressive acids and alkalis. 3M<sup>™</sup> chemical sorbents are convenient and rapid to deploy, major considerations in an emergency.



### **Product Overview**

**Features and Benefits:** 

+ Easy to dispose of

+ Promotes safety on the site

Immediate response to chemical spillages
Fast and effective containment and clean-up
Suitable for use with most chemicals

 Available in several formats including mini-booms, pillows, sheets and rolls
 Products have a high capacity

+ Can be used with many aggressive chemicals

Product	Number	Size (CM)	No./case	Case sorbency (litres)	Case weight (kg)
Sheets	P110	28 x 33	200	50	6.5
Rolls	P130	33 x 3000	2	50	6.0
ROUS	P190	48 x 3000	2	72	8.6
Pillows	P300	18 x 38	16	32	3.3
Minibooms	P200	7.5ø x 120	12	45	5.5
Particulate	P500	(5.4Kg)	-	54	5.4
Multiformat	P-F2001	12 x 1520	3	119	8.2





3M<sup>™</sup> P-F2001 Multi-Format Chemical Sorbent



3M™ P190 Chemical Sorbent

3M<sup>™</sup> P130 Chemical Sorbent

Roll

Roll



3M<sup>™</sup> P200 Chemical Sorbent Mini-Boom



3M<sup>™</sup> P300 Chemical Sorbent Pillow



# 3M<sup>™</sup> Hazardous Spill Response Kits



3M Hazardous Spill Response Kits each contain a carefully selected variety of 3M<sup>™</sup> Chemical Sorbents. Available in five configurations, these convenient kits assist with providing fast and effective containment and clean-up of hazardous spills.

### 3M<sup>™</sup> Hazardous Spill Response Kits

- + Cleaning up hazardous chemical spills, drips, and leaks
- + Ideal for rapid response containment and cleanup
- + Hazardous material shipping
- + Cover bench tops in anticipation of a spill
- + Wiping up contaminated areas.

### 3M<sup>™</sup> DRSK-DP Disposable Spill Kit

A new and innovative way of dealing with everyday spills quickly and easily. Everything you need in one kit!

- + Unique design allows safer clean up less risk of injury
- + Specially designed brush means no need to handle glass and the dustpan kit seals reducing exposure to broken glass
- + Absorbs up to 1.5 Litres



#### 3M™ DRSK-DP Disposable Spill Kit

Contains 4 disposable spill kits with dispenser, 2 Multiformat sheets, Nitrile gloves, Dustpan and Brush, and a Disposable Bag and Tie per kit.

#### **Product Overview**

	SK360	SK210	SK75	SK26	SK5
Kits contain:					
P110 Sheets	300	100	100	10	10
P300 Pillows	24	12	12	5	1
P200 Mini-Booms	24	12	8	5	
P190 Roll	1	1			
PF-2001 Multi-Format	3	2			
Disposal bag and ties	20	10	5	2	1
Warning Sign	1	1			
Warning Tape	1	1			





3M™ SK 5 **Chemical Spill Kit** 





3M™ SK 26 **Chemical Spill Kit** 





3M™ SK 210 **Chemical Spill Kit** 

# Index

Product	Page
105 Face Seal Wipe	31
106 Carry Bag	31
1100/1110 Disposable Earplugs	70
1100/1120 Dispenser	70
1100B Dispenser	70
1100E Spectacles	103
1120/1130 Earplugs	70
1200E Premium Line Spectacles	103
1261/1271 Earplugs	73
1291 Earplugs	73
1310 Earplugs	74
2000 Series Particulate Filters	26
with EN143: 2000	26
2720 Classic Line Spectacles	96
2721 Classic Line Spectacles	96
2722 Classic Line Spectacles	96
2800 Ovespectacles	94
2802 Ovespectacles	94
2805 Ovespectacles	94
2820 Classic Line Spectacles	95
2821 Classic Line Spectacles	95
2822 Classic Line Spectacles	95
2840 Comfort Line Spectacles	98
2841 Comfort Line Spectacles	98
2842 Comfort Line Spectacles	98

Product	Page
2844 Comfort Line Spectacles	98
2845 Comfort Line Spectacles	98
2846 Comfort Line Spectacles	98
289 Replacement Lens	108
2890 Comfort Safety Goggles	108
2890A Goggles	108
2890AS Goggles	108
2890S Goggles	108
289A Replacement Lens	108
3100 Half Mask	28
3200 Half Mask	28
3351 A1	28
3391 A1P2 R	28
3700 Particulate Filter Holder	28
3728 P2 R	28
400 Overspray Guard	27
4251 Maintenance-Free Respirator	27
4255 Organic vapour + particulate respirator	27
4277 Organic vapour / inorganic + acid gas / particulate respirator	27
4279 Organic vapour / inorganic + acid gas / ammonia / particulate respirator	27
450 Protective Overboot	118
4520 Protective Coverall Type 5/6	114
4530 Protective Coverall Type 5/6	115
4540+ Protective Coverall Type 5/6	116
4565 Protective Coverall Type 4/5/6	117

Product	Page
5000 Series Particulate Filters with EN143: 2000	26
6000 Series Gas and Vapour Filters	26
6000 Series Ready to Use Packs	29
6035/6038 Series Particulate Filters with EN143: 2000	26
6200 Half Mask	29
6800 Full Face Mask	31
7002 Half Mask	30
7500 Series ready to Use Packs	30
7503 Half Mask	30
7725 P2R Prefilter	28
774 Prefilter Retainer	28
7907S Full Face Mask	32
8310 Particulate Respirator	17
8312 Particulate Respirator	17
8320 Particulate Respirator	17
8322 Particulate Respirator	16
8710 Particulate Respirator	13
8810 Particulate Respirator	13
8812 Particulate Respirator	13
8822 Cup-shaped Particulate Respirator	13
8825 Particulate Respirator	19
8833 particulate respirators	17
8835 Particulate Respirator	18
8835 Particulate Respirator	19
9310 Particulate Respirator	15

Product	Page
9312 Particulate Respirator	15
9320 Particulate Respirator	15
9322 Particulate Respirator	14
9332 Particulate Respirator	15
9906 Speciality Particulate Respirator	21
9913 Speciality Particulate Respirator	21
9914 Speciality Particulate Respirator	21
9915 Speciality Particulate Respirator	21
9922 Speciality Particulate Respirator	21
9925 Welding Particulate Respirator	20
9926 Speciality Particulate Respirator	21
9928 Welding Particulate Respirator	20
9936 Speciality Particulate Respirator	21
Adflo <sup>™</sup> Powered Air Respirator	64
AirCare™ Filtration Unit ACU01	50
AirCare™ Filtration Unit ACU02	50
Airstream™ PAPR Helmet AH1	52
Airstream™ PAPR Helmet AH4	52
Airstream™ PAPR Helmet AH7	52
BT-922 Disposable Breathing Tube Cover	49
BT-926 Flame Resistant Breathing Tube Cover	49
BX <sup>™</sup> Premium Line Spectacles	105
BX <sup>™</sup> Readers Premium Line Spectacles	105
ClearE-A-R 20™ Earplugs	73
Compressed Air Supply Tubes and Couplings	51

Product	Page
DRSK-DP Disposable Spill Kit	143
E-A-Rband <sup>™</sup> Earplugs	74
E-A-Rcaps™ Earplugs	74
E-A-Rflex <sup>™</sup> 14/20 Earplugs	74
E-A-Rsoft <sup>™</sup> 21 Earplugs	70
E-A-Rsoft™ FX Earplugs	70
E-A-Rsoft <sup>™</sup> Metal Detectable Earplugs	70
E-A-Rsoft™ Yellow Neons and Blasts Earplugs	70
E-A-R <sup>™</sup> Caboflex <sup>™</sup> Earplugs	74
E-A-R <sup>™</sup> Classic <sup>™</sup> Earplugs	71
E-A-R™ Classic™ Small Earplugs	71
E-A-R™ Classic™ Soft Earplugs	71
E-A-R™ Express™ Earplugs	72
E-A-R <sup>™</sup> Flexicap <sup>™</sup> Earplugs	74
E-A-R™ One-Touch™ Dispenser	70
E-A-R <sup>™</sup> Pro Seals <sup>™</sup> Earplugs	72
E-A-R <sup>™</sup> Push-Ins <sup>™</sup> Earplugs	72
E-A-R™ Reflex™ Earplugs	74
E-A-R™ Superfit™ 33/36 Earplug	71
E-A-R <sup>™</sup> Swerve <sup>™</sup> Earplugs	
E-A-R™ Tracers™ and Tracers™ 20 Earplugs	73
E-A-R™ Ultrafit X™ Earplugs	73
E-A-R™ Ultrafit™ 14/20 Earplugs	73
E-A-R™ Ultrafit™ Earplugs	73
E-A-R™ UltraTech™ Earplugs	73

Product	Page
Fahrenheit™ Comfort Goggle	109
Fahrenheit <sup>™</sup> for Peltor <sup>™</sup> Helmet	109
Fahrenheit™ T-N-Wear	109
FF-400 Ultimate FX Full Face Mask	33
Forestry Helmet Combination	88
Fresh-air C Compressed Air Respirator	65
Fuel™ X2 Premium Line Spectacles	104
G2000 Series Helmets	88
G3000 Helmet	89
Helmet Accessories	88
HT-622 Welding Shield	47
HT-629 Welding Visor	47
HT-701 Helmet	48
HT-702 Helmet	48
HT-705 Helmet	48
HT-707 Helmet	48
HT-748 / HT-749 Helmet	48
Industrial Helmet Combination	88
Integrated Eyewear	88
JS-330 Series Suit	122
JS-470/JS-470G Series Chemical and Respiratory Protective Suits (CRPS)	56
Jupiter <sup>™</sup> Powered Air Respirator	41
Jupiter™ Powered Air Turbo with with IS Cover	41
K101 Particulate Respirator	12
K102 Particulate Respirator	12

# Index

Product	Page
K111 Particulate Respirator	12
K112 Particulate Respirator	12
K113 Particulate Respirator	12
LED Light Vision Headlights	106
LED Light Vision <sup>™</sup> Premium Line Spec- tacles	106
M-A2002 Maintenance Sorbent Pad	139
M-B2001 Maintenance Sorbent Roll	139
M-F2001 Multi-Format Maintenance Sorbent	139
M-G1001/M-G1301 Maintenance Sorbent Rugs	139
M-M1002 Maintenance Sorbent Mini- Boom	139
M-N1001 Maintenance Sorbent Pillow	139
M-R2001 Maintenance Sorbent Drum Cover, High Capacity Case	139
Marcus Gronholm Large Size Premium Line Spectacles	101
Marcus Gronholm Premium Line Spec- tacles	101
Maxim Hybrid Goggles	107
Maxim <sup>™</sup> Welding Premium Line Spec- tacles	100
Maxim <sup>™</sup> Ballistic Premium Line Spec- tacles	100
Maxim™ Ballistic Premium Line Spec- tacles Band	100
Maxim <sup>™</sup> Premium Line Spectacles	100
Maxim <sup>™</sup> Utility Pack	100
No-Touch <sup>™</sup> Earplugs	72
Optime™ I Earmuffs	75
Optime™ I Foldable Headband	75
Optime™ I Headband	75
Optime™ I Helmet attachment	75

Product	Page
Optime™ I Hi-Viz	75
Optime™ I Neckband	75
Optime™ II Di-electric	76
Optime™ II Earmuffs	76
Optime <sup>™</sup> II Foldable Headband	76
Optime™ II Headband	76
Optime™ II Helmet attachment	76
Optime™ II Hi-Viz Headband	76
Optime™ II Neckband	76
Optime™ III Earmuffs	77
Optime <sup>™</sup> III Headband	77
Optime™ III Helmet attachment	77
Optime™ III Hi-Viz Headband	77
Optime <sup>™</sup> III Neckband	77
Optime <sup>™</sup> Push To Listen (PTL)	76
P-F2001 Multi-Format Chemical Sorbent	142
P110 Chemical Sorbent Sheet	142
P130 Chemical Sorbent Roll	142
P190 Chemical Sorbent Roll	142
P200 Chemical Sorbent Mini-Boom	142
P300 Chemical Sorbent Pillow	142
Peltor <sup>™</sup> Alert FM Radio Hearing Protector	82
Peltor™ Alert FM-Radio Hearing Protector, Headset	82
Peltor™ Alert FM-Radio Hearing Protector, Helmet Mounted	82
Peltor™ Lite-Com™ Basic	85

Product	Page
Peltor <sup>™</sup> Lite-Com <sup>™</sup> Basic Hearing Protec- tors, Headband	85
Peltor^ $TM$ Lite-Com^{TM} Basic Hearing Protectors, Helmet Mount	85
Peltor^M Lite-Com^M Basic Hearing Protectors, Neckband	85
Peltor <sup>™</sup> ProTac <sup>™</sup> II Black Hearing Protector	83
Peltor™ ProTac™ II Green Hearing Protector	83
Peltor <sup>™</sup> ProTac <sup>™</sup> II Hearing Protectors	83
Peltor <sup>™</sup> ProTac <sup>™</sup> II Red Hearing Protector	83
Peltor <sup>™</sup> Radio Hearing Protector	81
Peltor <sup>™</sup> Tactical <sup>™</sup> XP Headband	84
Peltor™ Tactical™ XP Headset	84
Peltor™ Tactical™ XP Helmet Mounted Headset	84
Peltor <sup>™</sup> Tactical <sup>™</sup> XP Neckband	84
Peltor™ WS Workstyle™	80
Powerflow <sup>™</sup> Plus Powered Air Purifying Respirator	53
Protective visor with $3M^{TM} Adflo^{TM} PAPR$	64
Protective visor with $\mathbf{3M}^{\mathrm{TM}}$ Fresh-air C	65
Pulsar™ Earplugs	74
Refine <sup>™</sup> 300 Series Spectacles	102
Reflective Materials	130
S-200 Regulator	32
S-200 <sup>™</sup> Supplied Air System	54
SK 210 Chemical Spill Kit	143
SK 26 Chemical Spill Kit	143
SK 360 Chemical Spill Kit	143
SK 5 Chemical Spill Kit	143

Product	Page	Ρ
SK75 Chemical Spill Kit	143	Н
Solar™ plugs	70	Н
Solus <sup>™</sup> Comfort Line Spectacles	99	Т
Speedglas™ 100 Welding Shield	62	T
Speedglas <sup>™</sup> 100S-10 Welding Filter	62	T
Speedglas™ 100S-11 Welding Filter	62	Т
Speedglas <sup>™</sup> 100V Welding Filter	62	Т
Speedglas <sup>™</sup> 9000 shield with Adflo PAPR	64	T R
Speedglas <sup>™</sup> 9000 shield with Fresh-air C	65	Т
Speedglas <sup>™</sup> 9100 Welding Shield	61	Т
Speedglas™ 9100V Filter	61	Т
Speedglas™ 9100X Filter	61	Т
Speedglas™ 9100XX Filter	61	Т
Speedglas™ FlexView with Adflo PAPR	64	Ti
Speedglas <sup>TM</sup> FlexView with Fresh-air C	65	Т
Speedglas <sup>™</sup> SL Welding Shield	63	T
T-F2001 Multi-Format Oil Sorbent	140	Т
T100/T150 Oil Sorbent Roll	140	V
T126 Oil Sorbent Sweep		V
T151/T156 Oil Sorbent Sheets	140	V
T240 Oil Sorbent Pillow	140	V

Product	Page
HP156 Oil Sorbent Sheet	140
HP556 Oil Sorbent Sheet	140
T270/T280 Oil Sorbent Boom	140
T30 Oil Sorbent Pillow	140
T4/T8/T12 Oil Sorbent Mini-Boom	140
Thinsulate Insulation Type B	133
Thinsulate Insulation Type C	133
Thinsulate Insulation Type FR (Flame Resistant)	133
Thinsulate Insulation Type P	133
Thinsulate Insulation Type R	133
Thinsulate Insulation Type TIB	133
Tora™ Classic Line Spectacles	97
Torque™ Earplugs	72
Tri-Flange™ Earplugs	73
TSK 15 Tanker Spill Response Kit	141
TSK 30 Tanker Spill Response Kit	141
Tuffmaster™ Headgear	91
V1/V4 Series mesh visors	91
V2/V4 Series clear visors	91
V40 Multisystem	91
Versaflo™ BT-30 Breathing Tube	49

Product	Page
Versaflo <sup>™</sup> BT-40 Breathing Tube	49
Versaflo™ BT-20 S&L Breathing Tube	49
Versaflo™ M-100 Series Faceshields	46
Versaflo™ M-300 Series Helmets	46
Versaflo™ S-133 Headcover	45
Versaflo™ S-333G Headcover	45
Versaflo™ S-433 Hood	45
Versaflo™ S-533 Hood	45
Versaflo™ S-655 Hood	45
Versaflo™ S-657 Hood	45
Versaflo™ S-757 Painters Hood	45
Versaflo™ S-855E Hood	45
Versaflo™ TR-300 Powered Air Respirator	39
Versaflo™ TR-302E Turbo Unit	39
Versaflo™ TR-315E Starter Kit	39
Versaflo <sup>™</sup> V-100E Air Cooling Regulator	44
Versaflo <sup>™</sup> V-200E Air Heating Regulator	44
Versaflo™ V-500E Regulator	-43
Visionair <sup>™</sup> Supplied Air Visor System	55
WP Series Visors	91

3M does not accept liability of any kind, be it direct or consequential (including, but not limited to, loss of profits, business and/or goodwill) arising from reliance upon any information herein provided by 3M. The user is responsible for determining the suitability of the products for their intended use. Nothing in this statement will be deemed to exclude or restrict 3M's liability for death or personal injury arising from its negligence.