Breathe easy for years to come.

3M Disposable Respirators
Product Guide 2018

#3MScienceOfSafety
Airborne Hazards.

Finding the right protection...

Brick Dust
Brick dust and ash contains very fine particles of silica which can be breathed deep into the lungs and scar the delicate tissue (silicosis); exposure may also increase the risk of lung cancer.

Cement Dust
Some cement processes can also release very small particles of silica which can be breathed deep into the lungs and scar the delicate tissue (silicosis); exposure may also increase the risk of lung cancer.

Wood Dust
Exposure can cause occupational asthma in some individuals as inhalation of wood dust particles may initiate an allergic reaction causing them to become more sensitive in the future. Dusts from hardwoods may also cause cancers of the nose.

Lead
Dust and fumes inhaled from industrial processes involving lead or lead compounds may be absorbed and circulate in your blood. Lead can be excreted but it can also be stored by the body. If the amount of lead in your body is too high, it can cause symptoms such as headaches and nausea. If uncontrolled, long term exposure can damage vital organs.

Silica
Very small particles of silica dust, called respirable crystalline silica, can be breathed in and may reach deep into the lungs where it can scar the delicate tissue (silicosis) resulting in difficulties breathing. Long-term exposure to crystalline silica may also increase the risk of lung cancer.

Flour Dust
Inhalation of dust particles from flour can cause bronchitis and irritation to the nose and airways. In some people, exposure may cause occupational asthma, wheezing or serious breathing difficulties.

Welding
Inhalation of some metal oxides found in welding fumes can lead to metal fume fever - the symptoms are short term but include coughing, headaches and fever. Exposure to certain nickel and chromium compounds found in some welding fumes may increase the risk of lung cancer.
In 1969 3M invented the disposable respirator. We were also involved in the development, trial and authentication of qualitative fit testing protocols for respirators.

Since then, we have developed numerous proprietary technologies that have been incorporated throughout our comprehensive range of disposable respirators.

Workers need respirators that fit well, are comfortable and provide the best protection. Employers want quality products from a supplier they can trust. Our wide range of respirators helps to deliver easier breathing and comfortable protection against particles and certain gases and vapours. All our disposable respirators are compatible with eyewear and hearing protection products from 3M.

All 3M respirators meet the performance requirements of Australian/New Zealand Standard AS/NZS 1716:2012 'Respiratory protective devices'.
Cool Flow Valve.

Cool comfort starts with cool breathing

The proprietary 3M™ Cool Flow™ valve is designed to release your hot, humid exhaled breath quickly, helping to prevent an unpleasant build up of heat inside the facepiece - a significant cause of discomfort to respirator wearers.

The Cool Flow valve’s efficiency in keeping breathing cool and comfortable has been demonstrated through testing*: the atmosphere inside a respirator with a Cool Flow valve is on average 4.2°C cooler than the similar product without the valve.

This makes Cool Flow valved respirators ideal for long periods of wear, especially where conditions are hot, humid or physically demanding.

To learn more and see the Cool Flow valve in action, visit www.3m.com.au/CoolFlow or www.3m.co.nz/CoolFlow.

* Testing conducted in a 3M laboratory. Testing protocol, data generation and conclusions were reviewed and approved by an expert from The University of Minnesota. The testing performed by 3M is not a part of the testing and certification conducted by NIOSH.

Expel heat as you exhale it

Unique proprietary design
• Seals during inhalation
• Easily opens during exhalation

Aerodynamically designed valve cover
• Directs airflow away from your eyes and face to help reduce eyewear fogging

In combination with 3M proprietary filter media
• The Cool Flow valve helps minimise breathing effort required by respirator wearer

Visible from outside: the comfort difference with 3M™ Cool Flow™ valve

The colors in the thermal images below show the change in surface temperature of the respirators as the model inhales and exhales.

Inhalation: unvalved 3M 8510  |  Inhalation: valved 3M 8511
Exhalation: unvalved 3M 8510  |  Exhalation: valved 3M 8511

Inhalation

Is the cooler part of the cycle; with both valved and unvalved respirators, the 3M filter media facilitates an easy draw of cooler external air.

As the wearer inhales, air is pulled through the respirator and surface temperature decreases. The valve’s plastic cover, because of the material composition, retains some of the heat.

Exhalation

As the wearer exhales the respirator is filled with warm, moist air. The cooler thermal imaging shades of the picture on the right indicate how the respirator fitted with the Cool Flow valve expels the breath, together with its natural heat, more rapidly. As the hot exhaled air exits through the valve, the rest of the respirator remains cooler and more comfortable. This benefit is ideal for long periods of wear, especially where conditions are hot and humid or when work is physically demanding and likely to cause heavy breathing.
The importance of comfort.

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

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

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

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

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

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

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.
Selecting the right product.

Selecting and specifying the appropriate respiratory protective equipment can seem daunting with so many factors to consider. Use our simple four step selection system to ensure the respirator you choose offers the correct levels of protection and comfort required by your employees.

1. Identify the hazards

<table>
<thead>
<tr>
<th>Industry</th>
<th>Application</th>
<th>Hazard</th>
<th>Filter Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>Sanding, Cutting, Drilling</td>
<td>Rust, metal particles, filler, concrete, stone, wood</td>
<td>P1</td>
</tr>
<tr>
<td></td>
<td>Sanding, Cutting, Drilling</td>
<td>Crystalline silica, cement, wood, steel, paints, varnish, anti-rust coating, steel, stainless steel, anti-fouling varnish</td>
<td>P1 P2</td>
</tr>
<tr>
<td></td>
<td>Low temperature oil spraying, lubricating</td>
<td>Mineral oil, agricultural mineral oil, horticultural mineral oil, oil foam spray, metal working fluid</td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>Sanding, Cutting, Drilling</td>
<td>Crystalline silica</td>
<td>P1</td>
</tr>
<tr>
<td></td>
<td>Plastering, Tunnelling, Sawing, Earthmoving, Carpentry</td>
<td>Dust, sawdust</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Painting, Spraying, Varnishing, Coating, Mixing</td>
<td>Water based paints, roller / brush applied spray coatings, adhesives, cleaning solvents (nuisance levels)</td>
<td>GP1</td>
</tr>
<tr>
<td>Metal Fabrication</td>
<td>Oxy-Acetylene cutting, Metal pouring, Soldering, Smelting, Welding, Work with Glass and Mineral fibres</td>
<td>Metal fume</td>
<td>P2</td>
</tr>
<tr>
<td>Welding</td>
<td>MIG, TIG, Mild Steel, Zinc (Autogen, MIG/MIK) Stainless Steel (Electrodes), soldering</td>
<td>Welding fume and ozone</td>
<td>P2</td>
</tr>
<tr>
<td>Agricultural / Forestry</td>
<td>Sawing, Cropping, cotton ginning, Feeding livestock, allergies</td>
<td>Wood dust, Grain dust, Cotton dust, Animal dander</td>
<td>P1</td>
</tr>
<tr>
<td></td>
<td>Handling infected animals, Cleaning animal sheds, Composting, Waste sorting</td>
<td>Bioaerosols, Bacteria, Fungus, Animal dander</td>
<td>P2</td>
</tr>
<tr>
<td></td>
<td>Spraying pesticide, Herbicide, Fungicide: *low vapour pressure organic compounds</td>
<td>Paint spray, Mist, Dust, Pesticide(water based)</td>
<td>GP1</td>
</tr>
<tr>
<td>Mining / Quarrying</td>
<td>Drilling, Blasting, Plant operators</td>
<td>Dust</td>
<td>P1</td>
</tr>
<tr>
<td></td>
<td>Drilling, Blasting, Plant Operations</td>
<td>Diesel exhaust/Smoke</td>
<td>P2</td>
</tr>
<tr>
<td>Healthcare</td>
<td>Infection control</td>
<td>Infectious aerosols, TB, Other Bacteria/Virus, Allergies, Pollen, Mold/Fungus</td>
<td>P2 N95</td>
</tr>
<tr>
<td>Aluminium Smelting, Cleaning</td>
<td>Chlorine based cleaning, smelting</td>
<td>Acid gases</td>
<td>P2</td>
</tr>
<tr>
<td></td>
<td>Chlorine based cleaners</td>
<td>Acid gases</td>
<td>P1</td>
</tr>
<tr>
<td>Agricultural / Forestry</td>
<td>Pesticide spraying, solvent cleaning, welding</td>
<td>Organic vapour</td>
<td>GP2</td>
</tr>
<tr>
<td></td>
<td>Pesticide spraying, solvent cleaning</td>
<td>Organic vapour</td>
<td>GP1</td>
</tr>
<tr>
<td>Food and Beverage Manufacturing / Pharmaceutical</td>
<td>Food handling/Fruit &amp; Vegetable Processing/ Manufacturing Pharmaceutical - shaping/tablet formation, cleaning &amp; maintenance</td>
<td>Duffs, mists and fumes generated during handling of cereal &amp; non-cereal flours, nuts, additives, spices, condiments, coffee, sugar, egg and fish proteins, confectionery, animal &amp; bird feed</td>
<td>P1</td>
</tr>
<tr>
<td></td>
<td>Shaping/tablet formation, medicinal and pharmaceutical product manufacturing, cleaning &amp; maintenance</td>
<td>Pharmaceuticals during the production of prescription drugs</td>
<td></td>
</tr>
</tbody>
</table>
2. Assess the risk

P1 is the rating given to a respirator which meets AS/NZS1716:2012 for filtering mechanically generated particles, e.g., particles formed by crushing, grinding, drilling, sanding and cutting.

P2 is the rating given to a respirator that meets AS/NZS1716:2012 for filtering mechanically and thermally generated particles, e.g., those from welding fume. Respirators with a P2 rating are also recommended for use in certain applications against some bioaerosols such as H1N1 and H5N1 Influenza.

Type ‘G’ class rating is suitable for low vapour pressure (below 1.3Pa @ 25°C) organic compounds e.g. many agricultural chemicals like herbicide and pesticide.

3. Select the right respirator

Choose a valved/ unvalved 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 and whether it is valved or not.

Benefits of a Valved Respirator
- Reduces exhalation effort
- Cooler to wear
- Stays comfortable for longer
- Less likely to mist up eyewear

Benefits of a Unvalved Respirator
- Lower unit cost
- Reduces potential for wearer contamination of their environment

Choose a style

You can choose from: Comfort, Classic and Basic Series. Specialty respirators that provide comfortable protection against particles and certain gases and vapours are also part of our range as are lightweight and effective welding respirators. This wide selection enables you to select the respirator to suit your environment.

4. Fit Test  (see page 20)

A respirator cannot protect you if it does not fit your face.

Best practice for any Personal Protective Equipment is to ensure the right fit. Proper fitting of a respirator requires the application of an accepted method of fit testing. It is recommended that wearers be fit tested in accordance with Standards Australia’s Guidance document AS/NZS 1715:2009.

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 modules, 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.
Comfort Series

9300A+ Aura™ Particulate Respirators

The 3M™ Aura™ Disposable Respirators 9300+ are the result of 3M’s continuous drive to improve comfort. They are packed with ground-breaking ideas, technologies and materials and have also retained many of the features that helped make the original 9300 series hugely popular. Features include low breathing resistance filter technology for easier breathing throughout your shift, an embossed top panel to reduce fogging of eyewear, a sculpted edge for improved compatibility with eyewear and a chin tab to improve ease of fitting.

Features and Benefits

Low breathing resistance
- Combines the benefits of 3M’s electret particulate filter material with advanced low breathing resistance filter technology
- Gives effective filter performance whilst lowering resistance to breathing
- Improved breathing ease and comfort

3M™ Cool Flow™ valve
- Effectively removes heat build up
- Provides a cooler and more comfortable wear
- Removes exhaled air and minimises the risk of fogging eyewear

Convenience
- Flat-folded: easy to store when not in use
- Hygienic individual packaging helps protect the respirator from contamination before use
- Innovative chin tab improves ease of donning and adjustment to help achieve a comfortable fit

Clear vision
- Embossed top panel helps reduce fogging of eyewear

Sculpted nose panel
- Adjustable noseclip helps provide a custom secure seal
- Curved low profile design conforms well to nose and eye contours, allowing more room for eyewear
- Helps provide a good field of vision
- Improves compatibility with eyewear

Face and head comfort
- Ingenious 3-panel design fits a wide range of face shapes and sizes
- Accommodates your facial movements
- Collapse resistant; ideal for work in hot humid environments
- Stays securely in place, helping to provide a good, comfortable seal
- Large water/ sweat absorbent nose foam material is soft on the skin
- Smooth inner cover web helps to create a comfortable environment for the face

The 3M™ Cool Flow™ valve is available only on 3M respirators.
Comfort Series

9422+ Aura™ Particulate Respirators

3M™ Aura™ Disposable Respirators 9422+ are specifically designed for the food industry, coloured bright blue for easy identification and constructed without staples or small detachable parts. Ideal for the food manufacturing industry or other work situations where workers are exposed to dusts, mists and fumes requiring FFP2 protection.

Features and Benefits

**Food industry specific design and material**
- Highly visible blue flat fold disposable P2 respirator offering reliable, effective protection against moderate levels of fine dust & mists
- Made without staples or small detachable parts
- Embedded metal nose clip and highly visible blue colour for quick search recognition to help ensure the safety of your production
- Maximum usage level: Up to 10 x Workplace Exposure Standard.

**Low breathing resistance**
- 3M electret particulate filter technology for easier breathing through your shift
- Gives effective filter performance whilst lowering resistance to breathing
- Improved breathing ease and comfort

**3M™ Cool Flow™ valve**
- Reduces heat and moisture build-up to offer workers comfortable protection - even in hot and humid conditions

**Convenience**
- Supplied in hygienic packaging to help protect the respirator from contamination before use
- Allows practical storage and dispensing in the workplace.

**Innovative chin tab**
- Provides ease of donning and adjustment of the respirator on the face

**Clear vision**
- Embossed top panel to reduce fogging of eyewear
- Curved, low profile design
- Conforms well to nose and cheek contours
- Helps provide a good field of vision
- Improves compatibility with eyewear

**Face and head comfort**
- Ingenious 3-panel design that accommodates greater facial movement during speech so much more comfortable to wear
- Sculpted nose panel helps conform to the nose and contours of the face and helps to improve compatibility with 3M eyewear
- Collapse resistant; ideal for work in hot humid environments
- Stays securely in place, helping to provide a good, comfortable seal
- Large soft nose foam material and smooth inner cover web help to create a comfortable environment for the face

Available as:
- 9422+ P2
- Valved
  - 10 respirators/box
  - 12 boxes/case

The 3M™ Cool Flow™ valve is available only on 3M respirators.
Comfort Series

8300 Series Particulate Respirators

The 8300 Series is 3M’s most recent addition to our range of disposable respirators. The 8300 Series is designed with your comfort in mind. The super soft, cushioned lining provides instant yet lasting comfort; whilst the robust design makes these respirators tough and durable. It also features an M-shaped nose clip to make it easier to fit and be more comfortable around your nose.

Features and Benefits

Braided Straps
- Materials have been selected for extra comfort
- Colour coded straps to indicate performance level

M-Shaped Nose Clip
- Quick and easy nose clip for wearers to shape around the nose offering greater comfort and better fit

3M™ Cool Flow Valve (8322 & 8312)
- Effective removal of heat and moisture build-up provides a cooler and more comfortable wear
- Removes exhaled air and minimises risk of misting eyewear

Robust Outer Shell
- Shell construction offers users added durability

'Cushion-Fit' Lining
- Super-soft, cushioned inner lining helps workers to stay comfortable

Soft Waffle Edge
- Flexible, textured edge offers a comfortable and secure fit

3M™ High Performance Filter Media
- Effective filtration combined with low breathing resistance
- Consistent high quality performance

The 3M™ Cool Flow™ valve is available only on 3M respirators.

Available as:

- **8322**
  - Valved
  - 10 respirators/box
  - 8 boxes/case

- **8320**
  - Unvalved
  - 10 respirators/box
  - 8 boxes/case

- **8312**
  - Valved
  - 10 respirators/box
  - 8 boxes/case

- **8310**
  - Unvalved
  - 10 respirators/box
  - 8 boxes/case

P1   P2
Classic Series

8000 Series Particulate Respirators

The Classic Respirator Series provides lightweight, comfortable and effective respiratory protection against particulates. The cupped shape, twin strap design, nose foam and nose clip help to provide comfort and fit over a range of face sizes.

The 3M™ 8710 respirator was the first disposable respirator to be certified to AS/NZS 1716. Still widely used today, this respirator is trusted by millions of workers all over the world.

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

Features and Benefits

Comfort
• Adjustable nose clip helps reduce eyewear fogging and ensures a better seal and fit
• Two point latex free straps help to provide a secure fit
• Comfortable, lightweight, off-the-face design

Safety
• Reliable, effective protection against particles
• Durable, collapse resistant inner shell

3M™ Cool Flow Valve (8822 & 8812)
• 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

3M™ High Performance Filter Media
• Effective filtration combined with low breathing resistance
• Consistent high quality performance

Available as:

<table>
<thead>
<tr>
<th>8822</th>
<th>Valved</th>
<th>10 respirators/box</th>
<th>24 boxes/case</th>
</tr>
</thead>
<tbody>
<tr>
<td>8210</td>
<td>Unvalved</td>
<td>20 respirators/box</td>
<td>8 boxes/case</td>
</tr>
<tr>
<td>8110S</td>
<td>Small</td>
<td>20 respirators/box</td>
<td>8 boxes/case</td>
</tr>
<tr>
<td>8812</td>
<td>Valved</td>
<td>10 respirators/box</td>
<td>24 boxes/case</td>
</tr>
<tr>
<td>8710</td>
<td>Unvalved</td>
<td>20 respirators/box</td>
<td>8 boxes/case</td>
</tr>
</tbody>
</table>

The 3M™ Cool Flow™ valve is available only on 3M respirators.
Basic Series

8000 Series Particulate Respirators

You don’t have to sacrifice reliability, quality or service just to save on your protective equipment. With 3M’s Basic Particulate Respirators, you get the product you need at an economical price – all from a company you know and trust.

This product is the one to choose when you need a lower cost respirator that offers reliable protection for use in a variety of dusty applications.

Features and Benefits

Adjustable Nose Clip
- Reduces eyewear fogging and helps ensure a better seal and fit

Two-Point Strap
- Helps provide a secure fit
- Latex free

Lightweight Construction
- Enhances worker comfort and wear time

3M™ High Performance Filter Media
- Effective filtration combined with low breathing resistance
- Consistent high quality performance

Available as:

8000
Unvalved
30 respirators/box
8 boxes/case

8205
Unvalved
20 respirators/box
8 boxes/case
Basic Series

VFlex™ Particulate Respirator

The VFlex is a unique addition to 3M’s range of disposable particulate respirators. Its V-shaped pleats expand to provide a comfortable seal while giving you a spacious feel. The pleats flex with mouth movement for comfort and to maintain face seal performance.

Potential applications and industries for the VFlex include: sweeping, sanding, grinding, sawing, food preparation, agriculture, mineral processing, laboratories, dry chemical handling and more.

Features and Benefits

Adjustable Nose Clip
- Helps provide a custom fit and secure seal
- Embedded, metal detectable

V-shaped pleats
- Flex with mouth movement for easier talking
- Expand to assist face fit performance

Tabs
- Uniquely designed to assist with positioning the respirator on the face

3M™ High Performance Filter Media
- Effective filtration combined with low breathing resistance
- Consistent high quality performance

Elastic Headbands
- Contains no natural rubber latex components

Flat-fold Convenience
- Convenient storage prior to use

Additional Design Features
- Embossed front panel helps the respirator to retain its shape
- Comfortable inner layer
- Spacious inside with minimal impact on field of vision
- Compatible with a variety of eyewear and hearing protection from 3M

Available as:

Unvalved
10 respirators/box
16 boxes/case
The 3M Welding Respirator provides lightweight, effective, and comfortable respiratory protection. This durable respirator is designed specifically for welding applications to provide protection against ozone and welding fumes, plus relief from nuisance odours. It is resist clogging and does not require costly and time-consuming maintenance. Like our other disposable respirators, the welding respirator is compatible with 3M eyewear and hearing products. It is also compatible with 3M™ Speedglas™ Welding Shields.

**Features and Benefits**

**Robust Shell and Cup Design**
- Deep loading, cake resistant, flame retardant media
- Conforms well to most face shapes and sizes
- Resistant to collapse

**Straps**
- 3M™ Universal Buckle adjustment offers a comfortable and secure feel
- Heavy duty straps

**3M™ Cool Flow Valve**
- Effective removal of heat and moisture build-up provides a cooler and more comfortable wear
- Removes exhaled air and minimises risk of misting eyewear

**Activated Carbon layer**
- The 8514 has an additional activated carbon layer to filter out ozone and nuisance levels* of organic vapour

**3M™ High Performance Filter Media**
- Effective filtration combined with low breathing resistance
- Consistent high quality performance

* Nuisance levels are those levels below the Safe Work Australia Exposure Standards.

Available as:
- Valved
- 10 respirators/box
- 8 boxes/case

The 3M™ Cool Flow™ valve is available only on 3M respirators.
Specialty Respirators
Organic Vapour

The Organic Vapour Specialty Respirators by 3M are developed for particular working environments. These respirators feature an integrated activated carbon layer that offers relief from levels of nuisance odours at concentrations below Safe Work Australia exposure standards.

They can be used for a wide variety of applications ranging from mining to weed spraying to waste sorting. The Specialty range provides lightweight, effective, comfortable and hygienic respiratory protection against particles and organic vapours.

Features and Benefits

Robust Shell and Cup Design
- Deep loading, cake resistant, flame retardant media
- Conforms well to most face shapes and sizes
- Resistant to collapse

3M™ Cool Flow Valve
- Effective removal of heat and moisture build-up provides a cooler and more comfortable wear
- Removes exhaled air and minimises risk of misting eyewear

Activated Carbon Layer
- All of these specialty products offer an additional activated carbon layer to filter out ozone and nuisance levels* of organic vapour

3M™ High Performance Filter Media
- Effective filtration combined with low breathing resistance
- Consistent high quality performance

* Nuisance levels are those levels below the Safe Work Australia Exposure Standards.

Available as:

- **9913V**: Valved 10 respirators/box 6 boxes/case
- **8247**: Unvalved 20 respirators/box 6 boxes/case
- **9913**: Unvalved 15 respirators/box 6 boxes/case
- **9923V**: Valved 10 respirators/box 6 boxes/case
- **8577**: Valved 10 respirators/box 8 boxes/case
- **9542A**: Unvalved 25 respirators/box 10 boxes/case

All with Nuisance Level Organic Vapour Relief
Specialty Respirators

Acid Gas

The Acid Gas Specialty Respirators by 3M provide lightweight, effective, comfortable and hygienic respiratory protection against particles, with additional relief from nuisance levels* of acid gases such as sulfur dioxide and hydrogen fluoride.

The cupped shape, twin strap design, foam nose seal and nose clip ensure comfortable wear over a wide range of face sizes.

Features and Benefits

Robust Shell and Cup Design
- Conforms well to most face shapes and sizes
- Maintains its shape during use
- Resistant to collapse

3M™ High Performance Filter Media
- Effective filtration combined with low breathing resistance
- Consistent high quality performance

3M™ Cool Flow Valve (9926 & 9916)
- Effective removal of heat and moisture build-up provides a cooler and more comfortable wear
- Removes exhaled air and minimises risk of misting eyewear

Two-Point Braided Straps
- Help provide comfortable, secure fit

Nuisance levels are those levels below the Safe Work Australia Exposure Standards.

Available as:

- **9926**
  - Valved
  - 10 respirators/box
  - 10 boxes/case

- **8246**
  - Unvalved
  - 20 respirators/box
  - 6 boxes/case

- **9916**
  - Valved
  - 10 respirators/box
  - 6 boxes/case

- **9915**
  - Unvalved
  - 15 respirators/box
  - 6 boxes/case

*P1, P2

All with Nuisance Level Acid Gas Relief

The 3M™ Cool Flow™ valve is available only on 3M respirators.
Features and Benefits

- Offers a fast and easy method for performing qualitative fit testing
- No calibration of equipment required
- No modification of facepiece required
- Test operator can be self-taught/instructed
- Each kit contains a hood and collar assembly, two nebulisers, sensitivity solution, test solution and detailed instructions
- Replacement solutions and accessories can be purchased separately
- Available with Sweet (FT-10) or Bitter (FT-30) solutions

The biggest contributor to reduced respiratory protection is poor fit. Conducting a fit test to ensure that a respirator with a tight fitting facepiece provides an adequate seal to the wearer’s face has long been considered best practice as part of a general respiratory protection program.

Reflecting this, a fit test for wearers of tight fitting respirators is now required for compliance to AS/NZS1715:2009.

The 3M Qualitative Fit Test apparatus FT-10 and FT-30 are designed for fit testing disposable and half face reusable respirators fitted with particulate or combination gas/vapour and particulate filters.
Specialty Respirators

Healthcare

The 1860, 1860S, 1804, 1804S and 1870+ healthcare respirators are designed to help provide respiratory protection for the wearer by reducing exposure to harmful airborne particles which are small enough to be inhaled – typically particles less than 100 microns in size. These include airborne particles that may contain biological material e.g. Bacillus anthracis, Mycobacterium tuberculosis, mould and the virus that causes Severe Acute Respiratory Syndrome (SARS), and Influenza.

As a disposable particulate respirator, it is intended to reduce wearer exposure to certain airborne particles including those generated by electrocautery, laser surgery, and other powered medical instruments.

As a surgical mask, it is designed to be fluid resistant to splash and spatter of blood and other infectious materials.

Features and Benefits

- NIOSH approved N95
- Meets CDC guidelines for Mycobacterium tuberculosis exposure control
- 3M™ Advanced Electrostatic Media (AEM) - Highly charged microfibers enhance the capture of airborne particles while allowing you to breathe easier
- FDA cleared for use as a surgical mask
- BFE (Bacterial Filtration Efficiency) > 99% and PFE (Particle Filtration Efficiency) > 95% (at 0.3μm particle size) according to ASTM F2101
- Fluid resistant according to ASTM F1862

Safety

- Respirator contains no components made from natural rubber latex
- Nose clip mouldable to wearer’s nose shape to help reduce eyewear fogging and ensure a better seal and fit

Available as:

- 1804
  - Unvalved
  - 50 respirators/box
  - 8 boxes/case
- 1804S Small
  - Unvalved
  - 50 respirators/box
  - 8 boxes/case
- 1860
  - Unvalved
  - 20 respirators/box
  - 6 boxes/case
- 1860S Small
  - Unvalved
  - 20 respirators/box
  - 6 boxes/case
- 1870+
  - Unvalved
  - 20 respirators/box
  - 6 boxes/case
- N95
3M™ Aura™ Health Care Particulate Respirator and Surgical Mask 1870+
- Individually wrapped to ensure cleanliness of respirator each time
- Flat-fold design allows for convenient storage prior to use
- Embossed top panel helps reduce eyewear fogging
- Sculpted top panel allows more room for eyewear
- Innovative chin tab for ease of positioning, donning, adjustment
- Highest level of fluid resistance according to ASTM F1862 at 160 mm Hg

3M™ Health Care Particulate Respirator and Surgical Mask 1860 and 1860S
- Collapse resistant cup shape design
- Braided headbands, cushioning nose foam, and light weight construction for comfortable wear
- Available in 2 sizes to fit a broad range of faces (1860 and 1860S)
- Fluid resistant according to ASTM F1862 at 120 mm Hg

3M™ VFlex™ Health Care Particulate Respirator and Surgical Mask 1804 and 1804S
- Uniquely designed tabs for respirator positioning on the face
- Flatfold design allows for convenient storage prior to use
- Pleats help increase surface area for ease of breathing and flex with mouth movement while talking
- Available in 2 sizes to fit a broad range of faces (1804 and 1804S)
- Fluid resistant according to ASTM F1862 at 80 mm Hg

Potential settings and applications
Operating Rooms, Clinics, TB Wards, Patient Care, Labor and Delivery, Infection Control Practices, Laboratory, emergency or pandemic preparedness planning, stockpiling, etc.

WARNING: These respirators help reduce exposures to certain airborne contaminants. User is solely responsible for selection of appropriate PPE equipment for the setting and application. Before use, the wearer must read and understand the User Instructions provided as a part of the product packaging and for ensuring proper donning and doffing.
The Importance of Fit.

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

These fitting instructions must be followed each time a 3M™ Aura™ Particulate Respirator 9300A+ Series is worn.

1. With the reverse side up and using the tab, separate the top and bottom panels of the respirator to form a cup shape. Bend slightly at the centre of the noseclip.
2. Ensure that both panels are fully unfolded.
3a. Cup the respirator in one hand with the open side towards your face.
3b. Take both straps in your other hand. Hold the respirator under your chin, with the nosepiece facing upwards and pull the straps over your head.
4. Locate the upper strap across the crown of the head and the lower strap below your ears. The straps must not be twisted. Adjust the top and bottom panels for a comfortable fit, ensuring that the panels and tab are not folded in.
5. Using both hands, mould the noseclip to the shape of the nose to ensure a close fit and a good seal.
   - The respirator may not fit as well if you pinch the noseclip using one hand. Use two hands.
6. Perform a fit-check by covering the front of the respirator with both hands taking care not to disturb its fit.
   - If you’re using an unvalved respirator, exhale sharply.
   - If you’re using a valved respirator, inhale sharply.
   - If air leaks around the nose, readjust the noseclip to eliminate leakage then repeat the fit check. If air leaks at the respirator edges, work the straps back along the sides of the head to eliminate leakage then repeat the fit check.
   - If you cannot achieve a proper fit, DO NOT enter the hazardous area. Consult your supervisor.

Make sure that your face is clean shaven. Respirators should not be worn with stubble, beards or other facial hair under the area of the face seal as these can prevent a good seal to the face.

Make sure that long hair is tied back and jewellery is removed so that it does not interfere with the seal to the face.

Noseclip should be moulded around nose and cheeks to give a good seal.

Make sure the panels are fully unfolded.

Respirator should be correctly positioned on your face and head.

Upper strap should be positioned on the crown of the head. Strap should not be twisted.

Lower strap should be positioned below the ears. Strap should not be twisted.
Selection Flowchart.

Use the selector below to identify which respirator may be preferred for increased worker comfort.

What type of particles are in your environment?

### Mechanically Generated (P1)

- Is the environment hot and humid or is additional worker comfort desired?
  - **NO**
  - Is nuisance level OV/AG reduction preferred?
    - **NO**
      - Is a folded product preferred?
        - **NO**
          - Economy
            - 8000[S]
          - Classic
            - 8710[M]
          - Comfort
            - 8310[M/L]
        - **YES**
          - 9913(M)
          - 9915(M)
      - **YES**
        - 9913V(M)
        - 9916(M)
    - **YES**
      - Is a folded product preferred?
        - **NO**
          - Classic
            - 8812[M]
          - Comfort
            - 8312(M/L)
        - **YES**
          - 9310A+[M/L]
          - 9312+[M/L]
  - **YES**
    - Is nuisance level OV/AG reduction preferred?
      - **NO**
        - Classic
          - 8205[M]
          - Comfort
            - 8320(M/L)
      - **YES**
        - Economy
          - 8105[S]
          - Comfort
            - 8310[M/L]
          - Classic
            - 8210(M)
          - Welding
            - 8514[M/L]
      - **YES**
        - Is a folded product preferred?
          - **NO**
            - 8247(M)
            - 9542A[S/M]
          - **YES**
            - 8577[M/L]
            - 9923V(M)

### Thermally Generated (P2)

- Is the environment hot and humid or is additional worker comfort desired?
  - **NO**
    - Is nuisance level OV/AG reduction preferred?
      - **NO**
        - Is a folded product preferred?
          - **NO**
            - Economy
              - 8246(M)
            - Classic
              - 9332A+[M/L]
          - **YES**
            - 9926(M)
      - **YES**
        - Is nuisance level OV/AG reduction preferred?
          - **NO**
            - Is a folded product preferred?
              - **NO**
                - Economy
                  - 8246(M)
                  - Classic
                    - 9332A+[M/L]
              - **YES**
                - Is a galvanised steel clip required?
                  - **NO**
                    - 8247(M)
                    - 9542A[S/M]
                  - **YES**
                    - 8577[M/L]
                    - 9923V(M)

Key:
- S Small Size
- M Fits most face shapes and sizes
- L Fits large face sizes
- OV Organic Vapor
- AG Acid Gas

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Training and Support

3M’s team of Certified Occupational Hygienists and Technical Specialists offer support and training to meet the needs of our customers. They can provide customers:

- Initial and ongoing technical support
- Advice and training for your company, including audits for your workplace
- Fit testing coordination for respiratory and hearing protection

No matter how effective a piece of PPE is, it will offer little or no protection if it is not fitted and worn correctly. Proper inspection, cleaning and storage is vital for safety equipment that protects a worker’s health and well being.

That is why 3M offers training programs that explain the correct way to fit, inspect, clean and store the PPE designed and manufactured by our company.

3M TechAssist

3M TechAssist is the ideal point of contact for your questions, especially when you require a prompt answer. Supported by trained staff, Tech Assist is an immediate link to the worldwide resources of 3M.

Customers can contact TechAssist to answer questions on product information, technical advice, guidance with product selection, Australian Standards and other important information they need to know on a day-to-day basis.

You can contact 3M’s TechAssist service:

**Australia**
TechAssist Helpline on 1800 024 464
or by email at techassist@mmm.com

**New Zealand**
TechAssist Helpline on 0800 364 357

Nationwide Distributor Network

3M distributes our wide range of workplace safety products through a distributor network which includes over 250 stores and branches throughout Australia.

To find a 3M safety distributor near you, visit our website:

**Australia**
www.3M.com.au/ppesafety or ring 3M customer service on 1300 363 565

**New Zealand**
www.3M.co.nz/ppesafety or ring 3M customer service on 0800 252 627