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 comfort with ease of use.
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 – eg 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 develops first rectangular filter with unique seal-check capabilities
- 3M launches its 6000 Series Full Facepiece Respirator offering best-in-class field of view and lightweight characteristics
- 3M develops first HF P3 R nuisance OV filter. Offers lowest breathing resistance on the market
- 3M introduces Cool Flow™ Exhalation Valve for reduced heat and moisture in the 7500 Half Facepiece Respirator
1. Identify the Hazards

<table>
<thead>
<tr>
<th>Application</th>
<th>Hazard</th>
<th>Recommended Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Painting, Spraying, Varnishing, Coating</td>
<td>Solvent-Based Paint**</td>
<td>A2P3 R</td>
</tr>
<tr>
<td></td>
<td>Anti-Fouling Paint Spraying / Grinding</td>
<td>A2P3 R</td>
</tr>
<tr>
<td></td>
<td>Water Soluble Paint</td>
<td>A1P2 R</td>
</tr>
<tr>
<td></td>
<td>Solvents, Resins, Synthetic Resins**</td>
<td>A2P3 R</td>
</tr>
<tr>
<td></td>
<td>Latex-Paint, Residual Solvents</td>
<td>A2P3 R</td>
</tr>
<tr>
<td></td>
<td>Wood Preservatives</td>
<td>A1P2 R</td>
</tr>
<tr>
<td>Maintenance</td>
<td>Disinfection, Cleaning*</td>
<td>ABEK P2 R</td>
</tr>
<tr>
<td>Decoration</td>
<td>Spray-On Glue, Foam, Varnish, Adhesive</td>
<td>A1P2 R</td>
</tr>
<tr>
<td>Waste Removal</td>
<td>Bacteria, Spores, Odours</td>
<td>A1P2 R</td>
</tr>
<tr>
<td>Agriculture</td>
<td>Pesticides, Insecticides</td>
<td>ABEK1P2 R</td>
</tr>
<tr>
<td>Wood Treatment</td>
<td>Bonding, Spray-On Glue</td>
<td>A2P3 R</td>
</tr>
<tr>
<td>Construction, Grinding, Cutting, Drilling</td>
<td>Tarring</td>
<td>A2P3 R</td>
</tr>
<tr>
<td></td>
<td>Clamming, Sealing</td>
<td>A1P2 R</td>
</tr>
<tr>
<td></td>
<td>Spray Foam Insulation</td>
<td>A1P2 R</td>
</tr>
<tr>
<td></td>
<td>Organic Solvent/with boiling point less than 65 °C</td>
<td>AX P3 R</td>
</tr>
<tr>
<td></td>
<td>Ammonia Based Paint Remover</td>
<td>ABEK</td>
</tr>
<tr>
<td>Coating</td>
<td>Polyurethane Coating**</td>
<td>ABEP3 R</td>
</tr>
<tr>
<td></td>
<td>Solvent Based Varnish</td>
<td>A2</td>
</tr>
<tr>
<td></td>
<td>Water Based Varnish</td>
<td>A1</td>
</tr>
<tr>
<td>Bonding</td>
<td>Solvent containing Adhesives</td>
<td>A1</td>
</tr>
<tr>
<td>Handling</td>
<td>Sulphur Dioxide</td>
<td>ABE</td>
</tr>
<tr>
<td></td>
<td>Hydrochloric Acid</td>
<td>ABE</td>
</tr>
<tr>
<td></td>
<td>Liquid Manure</td>
<td>ABEK</td>
</tr>
<tr>
<td></td>
<td>Ammonia</td>
<td>K</td>
</tr>
<tr>
<td></td>
<td>Formaldehyde</td>
<td>A1 + Form</td>
</tr>
<tr>
<td></td>
<td>Hazardous goods storage/transport</td>
<td>ABEKP3 R</td>
</tr>
</tbody>
</table>

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 reusable half & full face respirators with gas and vapour filters:

- Half 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/m³ (0.1 Vol%); Class 2 filter up to 10 x TLV or 5,000 mg/m³ (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 filters may only be used for a single shift.
- A1 and A2 Filter for organic vapour with a boiling point above 65 °C.

2. Assess the Risk

Application limit of Particulate Respirators with removable filter

<table>
<thead>
<tr>
<th>NPF**</th>
<th>Important Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>half mask</td>
<td>full face mask</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>50</td>
<td>200**</td>
</tr>
</tbody>
</table>

* Nominal Protection Factor  ** 3M Limit

* excluding Formaldehyde

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

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

3.2 Select the Right Filter
3M™ reusable respiratory equipment requires regular checks and maintenance to ensure optimum performance and protection for the wearer. In addition to potentially reducing protection levels, poor maintenance can also reduce the effective lifetime of the equipment, resulting in the additional cost of replacement.

Guidance on the appropriate checks is provided in the instruction booklets with each new item.
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 can help you, so that you can choose which products are suitable to achieve the optimum results. Respirators by 3M offer safety and increase productivity.

### 3M™ 6000 Series Gas and Vapour Filters

<table>
<thead>
<tr>
<th>Filter</th>
<th>Protection level</th>
<th>Protection against</th>
</tr>
</thead>
<tbody>
<tr>
<td>6051 A1</td>
<td>organic gases &amp; vapours bp&gt;65 degrees°C</td>
<td></td>
</tr>
<tr>
<td>6054 K1</td>
<td>ammonia and derivatives</td>
<td></td>
</tr>
<tr>
<td>6055 A2</td>
<td>organic vapours bp&gt;65 degrees°C</td>
<td></td>
</tr>
<tr>
<td>6057 ABE1</td>
<td>organic vapours bp&gt;65 degrees°C, inorganic vapours and acid gases</td>
<td></td>
</tr>
<tr>
<td>6059 ABEK1</td>
<td>organic vapours bp&gt;65 degrees°C, inorganic vapours, acid gases ammonia and its derivatives, organic vapours bp&gt;65 degrees°C and formaldehyde</td>
<td></td>
</tr>
<tr>
<td>6075 A1+ formaldehyde</td>
<td>organic vapours, mercury vapours and particulates</td>
<td></td>
</tr>
</tbody>
</table>

**Filter against gases/vapours and particulate:**

<table>
<thead>
<tr>
<th>Filter</th>
<th>Protection level</th>
<th>Protection against</th>
</tr>
</thead>
<tbody>
<tr>
<td>6096 A1 HgP3R</td>
<td>organic vapours, mercury vapours and particulates</td>
<td></td>
</tr>
<tr>
<td>6098* AXP3R</td>
<td>single compound organic vapours (boiling point below 65 °C) and particulates</td>
<td></td>
</tr>
<tr>
<td>6099* A2B2E2K2P3 R</td>
<td>organic vapours, inorganic vapours and acid gases, ammonia, derivatives and particulates</td>
<td></td>
</tr>
</tbody>
</table>

* Only for full face masks.

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

### 3M™ 5000 Series Particulate Filters

**3M™ 2000 Series Particulate Filters**

<table>
<thead>
<tr>
<th>Filter</th>
<th>Protection level</th>
<th>Protection against</th>
</tr>
</thead>
<tbody>
<tr>
<td>2125 P2R</td>
<td>solid and liquid particles</td>
<td></td>
</tr>
<tr>
<td>2128 P2R</td>
<td>solid and liquid particles, Plus ozone protection 10 x TLV and organic vapours/acid gas below TLV</td>
<td></td>
</tr>
<tr>
<td>2135 P3R</td>
<td>solid and liquid particles</td>
<td></td>
</tr>
<tr>
<td>2138 P3R</td>
<td>solid and liquid particles. Plus ozone protection 10 x TLV and organic vapours/acid gas below TLV</td>
<td></td>
</tr>
</tbody>
</table>

**3M™ 6035/6038 Series Particulate Filters**

<table>
<thead>
<tr>
<th>Filter</th>
<th>Protection level</th>
<th>Protection against</th>
</tr>
</thead>
<tbody>
<tr>
<td>6035 P3R</td>
<td>solid and liquid particles – in solid plastic case for rough application</td>
<td></td>
</tr>
<tr>
<td>6038 P3R</td>
<td>solid and liquid particles. Hydrogen Fluoride gas up to 30 ppm and relief from nuisance level ozone, organic vapours and acid gases below TLV in solid plastic case for tough applications</td>
<td></td>
</tr>
</tbody>
</table>

**3M™ 5000 Series Particulate Filters**

**for combination with gas filters:**

<table>
<thead>
<tr>
<th>Filter</th>
<th>Protection level</th>
<th>Protection against</th>
</tr>
</thead>
<tbody>
<tr>
<td>5911 P1R</td>
<td>solid and liquid particles</td>
<td></td>
</tr>
<tr>
<td>5925 P2R</td>
<td>solid and liquid particles</td>
<td></td>
</tr>
<tr>
<td>5935 P3R</td>
<td>solid and liquid particles</td>
<td></td>
</tr>
<tr>
<td>501</td>
<td>filter retainer</td>
<td></td>
</tr>
</tbody>
</table>

5000 series filters can be used with 6000 series filters in conjunction with a 501 filter retainer, and without the 6000 series filters in conjunction with a 603 filter platform and a 501 filter retainer.
3M™ 4000 Series Maintenance-Free Reusable Respirators

The 4000 Series Respirators by 3M are a range of ready-to-use, maintenance-free half masks with built-in filters 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
+ Helps to achieve a stable secure fit
+ Easy to fasten neck strap

Cost Effective
+ Use until damaged, particulate filters clog, gas filters become saturated

Convenience
+ Resealable bag provides convenient and clean storage between uses

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

Compatible with
+ Eyewear from 3M
+ Hearing Protection from 3M

3M™ 4251 Maintenance-Free Respirator

3M™ 4000 Series Maintenance Free Respirators available:

3M™ 4251
Organic vapour* + particulate respirator
FFA1P2 R D

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

3M™ 4255
Organic vapour* + particulate respirator
FFA2P3 R D

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

*Organic vapours boiling point>65 degrees C

3M™ Accessories for 4000 Series

3M™ 400
Overspray Guard
3M™ 7500 Series Reusable Half Masks

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

Features and Benefits:

Head Harness
- Balanced, secure fit
- Reduced pressure and tension points

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

3M™ Cool Flow™ Exhalation Valve
- Less exhalation resistance
- Easier breathing
- Less heat and sweat build-up
- Reduces valve vibration
- Downwards flow of exhaled air
- Stays clean

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

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

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

Compatible with
- Eyewear from 3M
- Hearing Protection from 3M

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

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

Other Reusable Half Masks by 3M
3M™ 7002 Half Mask with rubber face seal and textured nose cup for reduced slippage and skin irritation.
Available in medium (3M™ 7002) and large size – (3M™ 7003) Half Mask

New Ready-to-Use Respirator Packs – 7500 Series

3M™ 7002M
A1P2R
A2P3R
3M™ 7003M
3M™ 6000 Series Reusable Half Masks

The 3M 6000 Series reusable half masks are economical, low-maintenance, simple to handle and lightweight. Available in three sizes, all masks have the 3M™ Bayonet Connection System allowing connection to a broad range of twin filters to protect against gases, vapours and particulates depending on your individual needs.

6000 series half masks by 3M can also be used with 3M™ Supplied Air Systems for your increased convenience and flexibility.

Features and Benefits:

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

**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 a more balanced fit
- Improved peripheral vision
- Safe and secure fit
- Optical marking of attachment point
- Flexible System for gas, vapour, particulate filters
- Optional supplied-air connection

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

**Compatible with**
- Eyewear from 3M
- Hearing Protection from 3M

With 3M’s new range of reusable Ready-to-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 organic 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™ 3000 Series Reusable Half Masks

The new 3M 3000 Series Respirators are the perfect fit for a tight budget, securing high levels of working protection and comfort at a hard-working 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 combination 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 piece secures a lasting comfort
+ available in two sizes (S/M and M/L)

Versatile
+ snap-on options suitable for a range of chores
+ filter 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 organic vapour protection bp>65 degrees°C

+ OR

Option 2: For organic gas, vapour and particulate protection

+ OR

Option 3: For organic gas and vapour

+ OR
3M™ 6000 Series Reusable Full Face Masks

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

Features and Benefits:

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

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

**4 Strap Head Suspension**
- Easy to put on and take off
- Well balanced

**3M™ Cool Flow™ Exhalation Valve**
- Less exhalation resistance
- Easier breathing
- Less heat and sweat build-up
- Reduces valve vibration
- Downwards flow of exhaled air
- Minimised dirt-traps to stay clean
- Sleek look and feel

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

Plus
- Available in three sizes:
  - 6700 – small
  - 6800 – medium
  - 6900 – large

Compatible with
- Hearing Protection from 3M
The 3M 7907S full face mask offers durability and safety for demanding tasks that require face and respiratory protection. The 3M™ Bayonet Connection System offers a broad range of twin lightweight filters to protect against gases, vapours and particulates depending on your individual needs.

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

**3M™ 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™ Bayonet Connection System offers a broad range of twin lightweight filters to protect against gases, vapours and particulates depending on your individual needs.

**Features and Benefits:**

**Six Strap Head Harness**
- Easy and secure fit for maximum safety
- Provides greater stability
- Easy release buckles

**Full Face Lens**
- Large polycarbonate lens with wide field of view
- Spectacle kit and lens covers available

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

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

**Compatible with**
- Hearing Protection from 3M

**3M™ 7907S Full Face Mask (Silicone)**
EN136 (Class 2)

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

**3M™ S-200 Regulator**
EN138:1994
NPF 50 with half mask
NPF 200 with full face mask
CE Marked