

# Technical Datasheet

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

#### **Main Features**

The 3M<sup>™</sup> 6000 Series Full Face Masks are proven to be simple to handle and comfortable to the wearer. The new exhalation port provides increased durability, easy cleaning and reduced breathing resistance which helps to increase your comfort. Available in three sizes, all masks have the 3M bayonet connection system allowing connection to a broad range of twin lightweight filters to protect against gases, vapours and particulates depending on your individual needs.

The main features include:

- Reusable, low maintenance respirator.
- Lightweight, well-balanced with soft silicone nose cup ensures comfort during long periods of work.
- Flexible System (gas & vapour and / or particulate filters plus Supplied-Air option).
- Twin filter design provides lower breathing resistance, a more balanced fit, and improves field of vision.
- Cost effective replacement filters.
- Safe, secure Bayonet filters attachment system.
- Wide field of vision with a scratch and chemical resistant polycarbonate lens.
- Easy and secure fitting.
- 3 sizes (small 6700, medium 6800, large 6900)
- Spectacle Kit available.
- Face piece weight: 400 grams.

#### **Applications**

The 6000 Series Respirators can be used with a variety of different filter options:

**Gas and Vapour Filters only:** The filters generally protect against either single or multiple contaminant type(s).

• The 6000 Series filters fit directly onto the respirator .

**Particulate filters only:** These filters provide protection against solid and non-volatile liquid particles.

- The 2000 Series particulate filters fit directly onto the respirator.
- The **5000 Series** particulate filters may be used on their own with platform 603 and 501 retainers.
- The 6035 & 6038 are encapsulated P3 filters, which fit directly onto the respirator.

#### Combination of Gas & Vapour and Particulate filters:

- The **5000 Series** particulate filters can be used with **6000 Series** Gas and Vapour filters using 501 retainers excluding the 6035, 6038, 6096, 6098 and 6099.
- The 6096, 6098 and 6099 have Particulate filter media integrated with the Gas and Vapour cartridge.
- The 6038 is an encapsulated particulate filter with a layer of carbon for low capacity gas protection.

**Supplied-Air mode:** All filters can be used with S-200 Supplied Air Regulator except for the P1 (5911) and P2 (5925, 2125 and 2128) filters, and 6098 and 6099.



## Gas and Vapour Filters:

FILTER	IMAGE	STANDARD	CLASS	HAZARD	INDUSTRY
6051 (06911) 6055 (06915)		EN14387: 2004 +A1:2008		Organic Vapours (b.pt. > 65°C)	<ul> <li>Anywhere conventional paints are used (non-isocyanates, subject to usage condi- tions)</li> <li>Vehicle manufacture</li> <li>Aircraft manufacture and refurbishment</li> <li>Boat Building</li> <li>Ink and dye manufacture and use</li> <li>Adhesive manufacture and use</li> <li>Paint and varnish manufacture</li> <li>Resin manufacture and use</li> </ul>
6054	Jan Barris	EN14387: 2004 +A1:2008	K1	Ammonia & derivatives	<ul> <li>Manufacture and Maintenance of refrigera- tion equipment</li> <li>Spraying and handling Agrochemicals</li> </ul>
6057		EN14387: 2004 +A1:2008	ABE1	Combination organic vapours (b.pt. >65°C), inorganic & acid gases	As 6051, but including: - Electrolytic processes - Acid Cleaning - Metal Pickling - Metal Etching
6059	<b>A</b>	EN14387: 2004 +A1:2008	ABEK1	Combination organic vapours (b.pt. >65°C), inorganic & acid gases & Ammonia	As 6057 & 6054
6075		EN14387: 2004 +A1:2008	A1 + Formaldehyde	Organic Vapours (b.pt. >65°C) & Formaldehyde	As 6051 but also: - Hospitals and Laboratories
6096		EN14387: 2004 +A1:2008	A1HgP3 R	Organic vapours (b.pt. >65°C), Mercury vapour, Chlorine & Particulates	- Use of Mercury & Chlorine - Particulate applications
6098		EN14387: 2004 +A1:2008	AXP3 NR	Organic Vapours (b.pt. < 65°C) & Particulates	- Chemical Industry - Particulate applications
6099		EN14387: 2004 +A1:2008	ABEK2P3 R	Organic Vapours, (b.pt. >65°C), Inorganic Gases, Acid Gases, Ammonia & Particulates.	As 6059 but also: - Particulate applications

### **Particulate Filters:**

FILTER	IMAGE	STANDARD	CLASS	HAZARD	INDUSTRY
5911 5925(06925) 5935		EN143:2000 / A1:2006	P1 P2 P3	Particulates (Fine Dusts & Mists)	Pharmaceutical / Powdered Chemicals     Construction / Quarrying     Ceramics / Refractory materials     Foundries     Agriculture     Woodworking     Food Industry
2125 2135		EN143:2000 / A1:2006	P2 R P3 R	Particulates (Fine Dusts & Mists)	<ul> <li>Pharmaceutical / Powdered Chemicals</li> <li>Construction / Quarrying</li> <li>Ceramics / Refractory materials</li> <li>Foundries</li> <li>Agriculture</li> <li>Woodworking</li> <li>Food Industry</li> </ul>
2128 2138		EN143:2000 / A1:2006	P2 R P3 R	Particulates, Ozone & nuisance levels of Organic Vapours & Acid Gases	<ul> <li>Welding</li> <li>Paper Industry</li> <li>Brewing</li> <li>Chemical Processing</li> <li>Typical Smog</li> <li>Inks and Dyes</li> </ul>
6035		EN143:2000 / A1:2006	P3 R	Particulates (Fine Dusts & Mists)	<ul> <li>Pharmaceutical / Powdered Chemicals</li> <li>Construction / Quarrying</li> <li>Ceramics / Refractory materials</li> <li>Foundries</li> <li>Agriculture</li> <li>Woodworking</li> <li>Food Industry</li> </ul>
6038		EN143:2000 / A1:2006	P3 R	Particulates, Hydrogen Fluoride at 30ppm, Nuisance levels of Organic Vapours & Acid Gases	As 6035 but also: - Aluminium smelting - Mining

### **Approvals**

The 3M 6000 Series Respirators and 6000/5000/2000 Series Filters have been shown to meet the Basic Safety Requirements under Article 10 and 11 B of the European Community Directive 89/686/EEC, and are thus CE-marked. These products were examined at the design stage by: BSI Product Services, Kitemark House, Maylands Avenue, Hemel Hempstead, Herts, HP2 4SQ, England (Notified Body 0086).

#### **Standards**

These products have been tested to the relevant European Standards:

- 6000 Series Full Face Masks to EN136:1998 Class 1.
- Relevant performance requirements of EN166: 2001 (Eye Protection - Protection against high speed particles, medium energy).
- 6000 Series Gas and Vapour filters to EN14387:2004 +
   A1:2008
- 2000 and 5000 Series and 6035, 6038 Particulate filters to EN143:2000 / A1:2006.

#### **Correct Usage**

## When the 6000 Series Full Face Mask is fitted with Gas & Vapour Filters:

- 6000 Series gas and vapour filters may be used in concentrations of gases or vapours (types specified by 3M) up to 200 x the Threshold Limit Value (TLV) or 1000ppm (5000ppm for 6055 and 6099) whichever value is lower.
- 6075 offers protection against organic vapour (as above) and 10ppm formaldehyde only.
- 6098 filters please see Instructions for Use or contact 3M for further information.
- 6000 Series gas and vapour filters should not be used to protect the wearer against a gas or vapour that has poor warning properties (smell or taste).

# When the 6000 Series Full Face Mask is fitted with Particulate Filters:

- 5911 filters may be used in concentrations of particulates up to 4 x TLV.
- 5925, 2125 or 2128 filters may be used in concentrations of particulates up to 16 x TLV.
- 5935, 2135, 2138 or 6035, 6038 may be used in concentrations of particulates up to 200 x TLV.
- 2128 and 2138 filters may be used to protect against ozone up to 10 x TLV and offers relief from acid gases and organic vapours at levels below the TLV.
- 6038 offers protection against 30ppm Hydrogen Fluoride and offers relief from ozone, acid gases and organic vapours at levels below the TLV.

#### **Cleaning and Storage**

Cleaning is recommended after each use.

- 1. Disassemble by removing the filters, nose cup, centre adapter, lens, head straps and face seal.
- Clean and sanitize the mask (excluding filters) using 3M<sup>™</sup> 105 Face Seal Cleaner or immersing in warm cleaning solution of water and household soap, and scrubbing with a soft brush until clean. Parts may also be cleaned in a domestic washer.
- Disinfect respirator by soaking in a solution of quaternary ammonium disinfectant or sodium hypochlorite or other disinfectant.
- Rinse in fresh, warm water and air-dry in noncontaminated atmospheres.
- Water temperature should not exceed 50°C. Do not use cleaning agents that contain lanolin or other oils. Do not autoclave.
- The lens is polycarbonate with an abrasion resistant coating but abrasive cleaners and some solvents may damage it. Avoid using acetone, methyl ethyl ketone, toluene, methylene chloride and other strong solvents.

#### **Use Limitations**

- These respirators do not supply oxygen. Do not use in oxygen deficient areas.\*
- 2. Do not use for respiratory protection against atmospheric contaminants that have poor warning properties or are unknown or immediately dangerous to life and health (IDLH) or against contaminants, which generate high heats of reaction with chemical filters. (The 3M S-200 Supplied-Air Respirator System can be used against contaminants with poor warning properties, subject to other use limitations).
- **3.** Do not misuse, alter, modify or repair this product.
- **4.** Do not use with beards or other facial hair that prevent direct contact between the face and the edge of the respirator.
- 5. Do not use with unknown concentrations of contaminants.
- 6. Do not use for escape purposes.
- 7. Leave the work area immediately and check the integrity of the respirator and replace face mask if:
  - Damage has occurred or is apparent.
  - Breathing becomes difficult or increased breathing resistance occurs.
  - Dizziness or other distress occurs.
  - You taste or smell the contaminant or an irritation occurs.
- 8. Store this device in a sealed container away from contaminated areas when not in use.
- Use strictly in accordance with respirator and filter user instruction leaflet.

\* 3M definition minimum 19.5% by volume oxygen

### **Fitting Instructions**

Before assigning any respirator to be worn in a contaminated area, we recommend that a qualitative or quantitative fit check be performed before entering the workplace.

Fitting instructions must be followed each time the respirator is worn.

- **1.** Fully loosen all four head straps, and then place the harness at back of head and position respirator over the face.
- **2.** Pull the ends of the four straps to adjust tightness, starting with the neck straps first, then the forehead straps.

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### **Fit Check**

Perform a positive and/or negative pressure fit check each time the respirator is donned.

## Positive pressure Face Fit check (all Filters except 3M<sup>™</sup> 6035, 6038 / 2000 Series Filters).

- 1. Place the palm of the hand over the exhalation valve cover and exhale gently.
- If the respirator bulges slightly and no air leakage between the face and the respirator is detected, a proper fit has been achieved.
- If air leakage is detected, reposition the respirator on the face and/or readjust the tension of the strap to eliminate the leakage.
- 4. Repeat the above face fit check.
- **5.** If you cannot achieve a proper fit, do not enter the contaminated area. See your supervisor.

#### Negative pressure face fit check (3M<sup>™</sup> 6035, 6038 / 2000 Series Filters)

- 1. Push the filter cover down (6035, 6038) or press your thumbs into the central indentation of the filters (2000 series), inhale gently and hold your breath for five or ten seconds.
- 2. If the respirator collapses slightly, a proper fit has been achieved.
- **3.** If air leakage is detected, reposition the respirator on the face and/or readjust the tension of the straps to eliminate the leakage.
- 4. Repeat the above face fit check.
- **5.** If you cannot achieve a proper fit, do not enter the contaminated area. See your supervisor.

### **Materials**

PART	MATERIAL		
Face Mask	Thermoplastic Elastomer		
Head Harness	Polyethylene		
Inhalation Valve	Polyisoprene		
Exhalation Valve	Silicone Rubber		
Gasket	Silicone Rubber		
6000 Filter Body	Polystryrene		
6000 Filter Element	Activated / Treated Carbon		
5000 / 2000 Series	Filter material Polypropylene		
Lens	Polycarbonate		

### **Spare parts**

PART	MATERIAL
6895	Inhalation Gasket
6893	Inhalation Valves
7583	Exhalation Valve
6864	Centre Adapter Assembly
6896	Centre Port Adapter Gasket
6897	Head Harness Assembly
6898	Lens Assembly
6885	Lens Covers (x25)
6878	Spectacle Kit
7883	Neck Strap Assembly
501	Retainer for 5000 Series Filters
603	Particulate Filter Platform
105	Face Seal Cleaner
S-200	Supplied Air Regulator

Respiratory Protection is only effective if it is correctly selected, fitted and worn throughout the time when the wearer is exposed to respiratory contaminants.

3M offers advice on the selection of products, and training in the correct fitting and usage.

For more information on 3M products and services please call the 3M Health & Safety Helpline.

#### Important Notice

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.



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