Technical Datasheet

3M™ Full Face Respirator 6000 Series

Main Features

The 3M™ 6000 Series Full Face Masks are proven to be simple to handle and comfortable to the wearer. The 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.
- Safe, secure bayonet filter 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 **3M™ Gas and Vapour Filters 6000 Series** filters fit directly onto the respirator.

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

- The **3M™ Particulate Disc Filters 2000 series** fit directly onto the respirator.
- The 6035 & 6038 (only available in Australia) are encapsulated P3 filters, which fit directly onto the respirator.

Combination of Gas & Vapour and Particulate filters:

- The **3M™ Particle Filters 5000 Series** 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 (only available in Australia).

Supplied-Air mode: All filters can be used with SA-2100 Supplied Air Regulator except for the 5925, 5935, 6098 and 6099 filters.

Gas and Vapour Filters:

FILTER	IMAGE	STANDARD	CLASS	HAZARD	SUGGESTED INDUSTRY EXAMPLES
6051 6055		AS/NZS 1716:2003	A1 A2	Organic Vapours (b.pt. > 65°C)	- Anywhere conventional paints are used (non-isocyanates, subject to usage conditions) - Vehicle manufacture - Aircraft manufacture and refurbishment - Boat Building - Ink and dye manufacture and use - Adhesive manufacture and use - Paint and varnish manufacture - Resin manufacture and use
6054		AS/NZS 1716:2003	K1	Ammonia & derivatives	- Manufacture and Maintenance of refrigeration equipment - Spraying and handling Agrochemicals
6057		AS/NZS 1716:2003	ABE1	Combination organic vapours (b. pt. > 65ºC), inorganic & acid gases	As for 6051, but including: - Electrolytic processes - Acid Cleaning - Metal Pickling - Metal Etching
6059		AS/NZS 1716:2003	ABEK1	Combination organic vapours (b.pt. > 65º C), inorganic & acid gases & Ammonia	As for 6057 & 6054
6075		AS/NZS 1716:2003	A1 + Formaldehyde	Organic Vapours (b.pt. > 65ºC) & Formaldehyde	As for 6051 but also: - Hospitals and Laboratories - MDF manufacturing
6096		AS/NZS 1716:2003	A1HgP3	Organic Vapours (b.pt. > 65ºC) Mercury vapour, Chlorine & Particulates	- Oil & Gas processing - Use of Mercury & Chlorine
6098		AS/NZS 1716:2003	AXP3	Low boiling point Organic Vapours (b. pt. < 65°C) & Particulates	- Chemical Industry - Particulate applications
6099		AS/NZS 1716:2003	ABEK2P3	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
5925 5935		AS/NZS 1716:2003	P2 P3	Particulates	- Pharmaceutical / Powdered Chemicals - Construction / Quarrying - Ceramics / Refractory materials - Foundries - Agriculture - Woodworking - Food Industry
2125 2135		AS/NZS 1716:2003	P2 P3	Particulates	- Pharmaceutical / Powdered Chemicals - Construction / Quarrying - Ceramics / Refractory materials - Foundries - Agriculture - Woodworking - Food Industry
2128 2138		AS/NZS 1716:2003	GP2 GP3	Particulates, Low vapour pressure (<1.3Pa @ 25 degrees Celsius) organic compounds, Ozone & nuisance levels of Organic Vapours & Acid Gases	- Welding - Paper Industry - Brewing - Chemical Processing - Agriculture - Inks and Dyes
6035		AS/NZS 1716:2003	P3	Particulates	- Pharmaceutical / Powdered Chemicals - Construction / Quarrying - Ceramics / Refractory materials - Foundries - Agriculture - Woodworking - Food Industry
6038 (Not available in New Zealand)		AS/NZS 1716:2003	P3HF	Particulates, Hydrogen Fluoride to 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 Australian/New Zealand and European Standards:

- 6000 Series Full Face Masks to AS/NZS 1337:1992 High Impact and protection from hot solids, 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 AS/NZS 1716:2003, EN14387:2004 + A1:2008
- 2000 and 5000 Series and 6035, 6038 Particulate filters to AS/NZS 1716:2003, 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 50x the Exposure Standard (ES) or 1000ppm (100x ES or 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:

- 5925, 2125 or 2128 filters may be used in concentrations of particulates up to 50x ES.
- 5935, 2135, 2138 or 6035, 6038 may be used in concentrations of particulates up to 100x ES.
- 2128 and 2138 filters may be used to protect against ozone up to 10x ES and offers relief from acid gases and organic vapours at levels below the ES.
- 6038 (not available in New Zealand) offers protection against 30ppm Hydrogen Fluoride and offers relief from ozone, acid gases and organic vapours at levels below the ES.

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.
2. Clean and sanitize the mask (excluding filters) using 3M™ Respirator Cleaning Wipes 504 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 dishwasher.
3. Disinfect respirator by soaking in a solution of quaternary ammonium disinfectant or sodium hypochlorite or other disinfectant.
4. Rinse in fresh, warm water and air-dry in non-contaminated 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

1. 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 SA-2100 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.
9. 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 test 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.

⚠ Do not over tighten the head straps.

Fit Check

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

Positive pressure face fit check.

1. Place the palm of the hand over the exhalation valve cover and exhale gently.
2. If the respirator bulges slightly and no air leakage between the face and the respirator is detected, a proper fit has been achieved.
3. If air leakage is detected, reposition the respirator on the face and/or re-adjust 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™ 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 re-adjust 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)
6886	Tinted Lens Covers (x25)
6878	Spectacle kit
7883	Neck Strap Assembly
501	Retainer for 5000 Series Filters
504	Respirator Cleaning Wipes
SA-2100	Dual Airline Kit

⚠ **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, 3M Australia 1800 024 464, 3M New Zealand 0800 364 357

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