Technical Datasheet

3M™ Reusable Half Face Respirator 6000 Series

Main Features

The 3M™ 6000 Series Respirators 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 respirators 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 half face respirator.
- Soft, lightweight elastomeric respirator 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 filter attachment system.
- Easy and secure fitting.
- 3 sizes (small - 6100, medium - 6200, large - 6300)
- Face piece weight: 82 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 except for the 6098 and 6099.

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 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 has 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 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 + Formalde-hyde	Organic Vapours (b. pt. > 65ºC) & Formaldehyde	As for 6051 but also: - Hospitals and Laboratories
6096		AS/NZS 1716:2003	A1HgP3	Organic Vapours (b. pt. > 65ºC), mercury vapour, chlorine & particulates	- Oil & Gas processing - Use of Mercury & Chlorine

Particulate Filters:

FILTER	IMAGE	STANDARD	CLASS	HAZARD	SUGGESTED INDUSTRY EXAMPLES
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 - Typical Smog - Inks and Dyes
6035		AS/NZS 1716:2003	P3	Particulates	- Pharmaceutical / Powdered Chemicals - Construction / Quarrying - Ceramics / Refractory materials - Foundries - Agriculture - Woodworking - Food Industry
6038		AS/NZS 1716:2003	P3	Particulates, Hydrogen Fluoride at 30ppm, Nuisance levels of Organic Vapours & Acid Gases	As 6035 but also: -Aluminium smelting - Mining

Approvals

These respirators have been produced to comply with the requirements of the Australian /New Zealand Standard AS/NZS 1716:2003 under an agreed production certification scheme operated during manufacture in accordance with the SAI Global StandardsMark programme.

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 Hempsted, Herts, HP2 4SQ, England (Notified Body 0086).

Standards

These products have been tested to the relevant Australian/New Zealand and European Standards:

- 6000 Series Half Face Respirators to AS/NZS 1716:2003, EN140: 1998.
- 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 Half Face Respirator is fitted with Gas & Vapour Filters:

- 6000 Series gas and vapour filters, it may be used in concentrations of gases or vapours (types specified by 3M) up to 10x the Exposure Standard (ES) or 1000ppm whichever value is lower.
- 6075 offers protection against organic vapour (as above) and a maximum of 10ppm formaldehyde only.
- 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 Half Face Respirator is fitted with Particulate Filters:

- 2000, 5000 or 6000 series particulate filters may be used in concentrations of particulates up to 10x ES
- 2128 and 2138 filters offer protection against organic compounds with low vapour pressures (<1.3Pa @ 25 degrees Celsius) in concentrations up to 10x ES.
- 2128 and 2138 filters may be used to protect against ozone up to 10x ES and offer relief from acid gases and organic vapours at levels below the ES.
- 6038 offers protection against a maximum of 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, head straps and other parts.
2. Clean and sanitize the respirator (excluding filters) using 3M™ Respirator Cleaning Wipes 504 or immersing in warm cleaning solution and scrubbing with a soft brush until clean. Parts may also be cleaned in a domestic washer.
3. Disinfect respirator by soaking in a solution of quaternary ammonium disinfectant or sodium hypochlorite (30 mL household bleach in 7.5L of water) or other disinfectant.
4. 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.**

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, which have poor warning properties, are unknown or immediately dangerous to life and health, or against chemicals, which generate high heats of reaction with chemical filters. (The 3M SA-2000 Supplied-Air Respirator System can be used against contaminants with poor warning properties, subject to other use limitations).
3. Do not modify or alter this device.
4. The assembled respirator may not provide a satisfactory face seal with certain physical characteristics (such as beards or large side burns) resulting in leakage between the respirator and the face. The user assumes all risks of bodily injury, which may possibly result.
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 respirator and / or filters 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 check be performed before entering the workplace.

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

1. Place the respirator over the mouth and nose, then pull the harness over the crown of the head.
2. Take the bottom straps in both hands, place them at the back of the neck and hook them together.
3. Tighten the top straps first by pulling on ends to achieve a comfortable and secure fit.
4. Tighten bottom straps using either front or rear adjustments. (Strap tension may be decreased by pushing out on back side of buckles).

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™ 6035, 6038 / 2000 Series Filters).

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 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™ 6035, 6038 / 2000 Series Filters)

1. Push the filter cover down or press your thumbs into the central indentation of the filters, 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 Seal	Thermoplastic elastomer
Head Harness	Polyethylene
Head Strap	Polyester / cotton / Polyisoprene
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

Spare parts

PART	MATERIAL
6895	Inhalation Gasket
501	Retainer for 5000 Series Filters
504	Face Seal Cleaner
SA-2000	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 TechAssist Helpine, 3M Australia 1800 024 464

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