

## 3M Help and Advice

#### **TechAssist Hotline**

For further advice on 3M<sup>TM</sup> Reusable Respirators and when to change 3M<sup>TM</sup> Particulate Filters and 3M<sup>TM</sup> Gas & Vapour Cartridge Filters (or any of our other 3M Safety Products) phone our TechAssist Helpline: 1800 024 464

#### **Specialist Sales Force**

You can also talk to your 3M OHES Sales Representative for help and advice with:

- Choosing 3M Reusable Respirators and when to change your 3M Particulate Filters and 3M Gas & Vapour Cartridge Filters
- · Respirator Training Programs and Fit Testing
- Site Surveys 3M can visit your worksite and give a report on respiratory hazards and recommended solutions.

# 3M Occupational Health & Environmental Safety Website:

Use our website to access product information and training tools www.3m.com/au/ohs.



Why and when to replace your

3M<sup>™</sup> Filters!

#### Please contact 3M through the following:

3M Australia Pty Ltd Phone 136 136

**3M Australia Pty Ltd Customer Service** Phone **1300 363 565** Fax **1800 656 222** 

3M TechAssist Hotline Phone 1800 024 464

World Wide Web www.3m.com/au/ohs



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### This is your guide\*\*\*

The purpose of this guide is to help answer questions about the 3M<sup>TM</sup> Particulate Filters and 3M<sup>TM</sup> Gas & Vapour Cartridge Filters that you use with your 3M<sup>TM</sup> Half Face or Full Face Reusable Respirators.

\*\*\*\* This booklet is designed to be a guide only. For specific advice on 3M Respiratory Products e.g. choosing a 3M Respirator, Fit Testing, and when to change your 3M™ Particulate Filters and 3M™ Gas & Vapour Cartridge filters call 3M TechAssist on 1800 024 464 or talk to your 3M OHES Sales Representative.



## What types of 3M™ Filters are there?

#### 3M™ Particulate Filters:

Protect only against particles i.e. dust, mists and fumes, aerosols, smoke, mould, bacteria and so on.





#### 3M™ Gas & Vapour Cartridge Filters:

Protect only against gases and vapours. There are different kinds of gas & vapour cartridge filters for different kinds of gases.



#### 3M™ Combination Filters:

Protect against both particles and gases. Different combination particulate/ cartridge filters are used depending on the gas or vapour present in the air.





# Why do I need to replace my 3M<sup>™</sup> Filters regularly?

# When do I replace my 3M<sup>™</sup> Particulate Filters?



Particulate filters get clogged up and become harder to breathe through.

Gas and vapour cartridge filters start to let contaminant through once their sorbents become saturated. This is called breakthrough.

**Important**: The selection of filters must be carried out by a competent person with a full knowledge of the respiratory hazards in the workplace.

Replace both the 3M<sup>TM</sup> Particulate Filters when:

- It becomes difficult to breathe comfortably (this will vary from individual to individual).
- The filter become dirty or physical damage occurs.

## How do 3M™ Particulate Filters work?



# How do 3M<sup>™</sup> Gas & Vapour Cartridge Filters work?

#### 3M™ Particulate Filters

These filters rely on the electrostatically charged fibres to trap particulates within the filter media.

As particulate filters load up with the contaminant, they actually become a better filter, however, they also become harder to breathe through.

AS/NZS1716 uses a classification system to identify the different types of particulates these filters will capture e.g. P1, P2, P3.

P1	Particles generated by mechanical processes e.g. grinding, sanding
P2	Particles generated by mechanical and thermal processes e.g. welding
Р3	Particles including highly toxic materials

#### 3M™ Gas and Vapour Cartridge Filters

These filters rely on sorbent material to "soak up" the gas and vapour molecules.

Typically the sorbent is carbon grain, which has been specifically treated. Depending on the chemical treatment of the carbon surface, this material will absorb different types of gases or vapours.

AS/NZS1716 uses a classification system to identify the different types of contaminants these treated carbon grains will capture e.g. A, B, E, K, Hg and G.

Α	Organic Vapours (boiling point > 65°C)	
В	Inorganic Gases	
Е	Acid Gases	
K	Ammonia	
Hg	Mercury	
G	Organic Compounds with low vapour pro	essures

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# When do I Replace 3M<sup>™</sup> Gas & Vapour Cartridge Filters?



## **Frequently Asked Questions**

The service life (i.e. how long it will last) of any gas and vapour cartridge filter is affected by many factors – some being: concentration and identity of contaminants, breathing rates, humidity levels, ventilation, temperature, carbon exposure time etc.

#### Replace both the 3M™ Gas & Vapour Cartridge Filters:

- When the expiry date stamped on the sealed packet has elapsed.
- Once opened, maximum use time is 6 months (even if not used). The carbon will absorb contaminants from the general environment.
- When contaminant can be detected by smell or taste.
- Or in accordance with your established Filter Change Schedule.

# To avoid smelling or tasting the contaminant when using 3M™ Gas & Vapour Cartridge Filters, take the following steps:

- When you get a new pair of 3M Gas & Vapour Cartridge Filters check the expiry date on the back of the pack.
- Write the date on the filters when first removed from the pack.
- Use the filters on your respirator in your normal work environment.
- If at any time you smell or taste the contaminant or irritation is detected, the filters need replacing.
- Take note of how long the filters lasted by comparing the date recorded on the filter and the current date.
- If work practices remain the same and the levels of vapours/gases are consistent, replace your filters on a more regular timescale.
- Or in accordance with your established Filter Change Schedule.

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For specific advice on when to change 3M<sup>™</sup> Particulate Filters and 3M<sup>™</sup> Gas & Vapour Cartridge Filters talk to your 3M 0HES Sales Representative or call the 3M TechAssist Helpline 1800 024 464

#### What is the shelf life of 3M™ Filters?

Provided they are stored unopened in the original packaging, filters will last five years from manufacture date. Once removed from their packaging they should be replaced after six months as recommended by Australian/New Zealand Standards (even if they have not been used).

## How should I store my 3M™ Reusable Respirator and filters?

When not in use, your 3M<sup>TM</sup> Respirator and Filters should be kept clean and dry, and away from oil and sunlight and corrosive atmospheres to avoid deterioration. A storage container or bag that can be sealed, can be utilised for this purpose.

# Why do I need to use a Particulate Filter with my Gas & Vapour Cartridge Filters for some applications?

The particulate filter removes the tiny droplets or particles in the air (e.g. mists from spray painting). The gas and vapour cartridge filters do not filter these particles. If no particulate filter is used, they could be breathed in.

#### What is a Fit Test?

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Because everyone's face is different, a fit test is used to determine an adequate match between the face piece of a respirator and the face of the wearer. Ideally this should be done before the respirator is first issued and then at regular intervals.

#### Can I wear a respirator with a beard?

Any facial hair has the potential to break the face seal of a respirator. We recommend that people wearing respiratory protection be clean-shaven, to enable the respirator to achieve a good seal against the face.

### Which 3M<sup>™</sup> Particulate Filters do I need?

#### 3M™ Particulate Filters

The  $3M^{\tiny{TM}}$  Particulate Disc Filters 2000 series and the  $3M^{\tiny{TM}}$  Particle Filters 5000 Series and Retainers attach to the  $3M^{\tiny{TM}}$  Half and Full Face Respirators to provide particulate protection.

- · Lightweight
- Low breathing resistance: uses both sides of the filter
- · Excellent field of vision
- \*  $3M^{\mathsf{TM}}$  Bayonet Filter Fixing System ensures precise and secure locking



Product Code	Description	Packaging	
2125	Particulate (P2)	1 pair/pack 40 pairs/case	ATT.
2135	Particulate (P2/P3)	1 pair/pack 40 pairs/case	Mark Constitution of the C
2128	Particulate, Ozone & Agricultural type Organic Vapours with low vapour pressure, Nuisance level Acid Gas (GP2)*	1 pair/pack 40 pairs/case	
2138	Particulate, Ozone & Agricultural type Organic Vapours with low vapour pressure, Nuisance level Acid Gas (GP2/GP3)*	1 pair/pack 40 pairs/case	(200 mm) (200 mm) (200 mm) (200 mm) (200 mm)
2076	Particulate & Hydrogen Fluoride (P2HF)	1 pair/pack 40 pairs/case	
6035	Particulate in Rectangular Bayonet style (P2/P3)	10 pairs/box 4 boxes/case	
5925	Particulate Filter used in conjunction with 6000 Series Cartridge Filters (P2)	10 pairs/box 4 boxes/case	
501	Particulate Filter Retainer, to hold the 5925 Particulate Filter	10 pairs/box 5 boxes/case	

<sup>\*</sup> Nuisance levels are those levels below the ASCC Exposure Standards



### 3M™ Gas & Vapour Cartridge Filters

The  $3M^{\mbox{\tiny M}}$  Gas & Vapour Cartridge Filters 6000 Series attach to  $3M^{\mbox{\tiny M}}$  Half and Full Face Respirators to provide gas and vapour protection.

- Lightweight
- Well balanced when fitted to a mask
- Provides excellent field of vision as a result of the unique trapezoidal shape
- 3M<sup>™</sup> Bayonet Filter Fixing System ensures precise and secure locking



Product Code	Description	Packaging	
6051B	Organic Vapours 1 pair/pack (boiling point > 65°C) (A1)	32 pairs/case	
6057B	Organic Vapours (boiling point > 65°C) Inorganic & Acid Gases (A1B1E1)	1 pair/pack 32 pairs/case	
6054B	Ammonia and Methylamine (K1)	1 pair/pack 32 pairs/case	
6075B	Organic Vapours & Formaldehyde (A1Form)	1 pair/pack 32 pairs/case	
6059B	Multi-Gas: Organic Vapours, (boiling point > 65°C) Inorganic and Acid Gases, Ammonia & Methylamine (A1B1E1K1)	1 pair/pack 32 pairs/case	
6096A	Organic Vapours (boiling point > 65°C) Mercury Vapours, Chlorine Gas, Particulates (A1HgP3)	1 pair/pack 16 pairs/case	
6099B	Mulit-Gas & Particulates: Organic Vapours (boiling point > 65°C), Inorganic & Acid Gases, Ammonia, Methylamine & Particulates (A2B2E2K2P3)	1 pair/pack 16 pairs/case	

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