

# 3M™ Half Facepiece Reusable Respirator, 7500 Series

## **Technical Data Sheet**



#### **Main Features**

3M™ 7500 Series Respirators have set a new standard in comfort. The exhalation valve provides increased durability and is easy to keep clean. Reduced breathing resistance helps to minimise heat built-up in the facepiece and increases your comfort. Available in three sizes, all facepieces 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 facepiece can also be used with the 3M™ SA-2000 Supplied-Air System for increased convenience and flexibility.

#### The main features include:

- Durable, reusable half facepiece with full maintenance program available.
- Soft silicone material reduces pressure/ tension on face for added comfort during long periods of work.
- Flexible System (gas / vapour and / or particulate filters plus Supplied-Air option).
- Exhalation valve ensures easier breathing while reducing heat and moisture build-up. It also eliminates valve vibration for easier communication
- Downward direction of exhalation air reduces fogging when using grinding and welding shields.
- Twin filter design provides lower breathing resistance, a more balanced fit, and improves field of vision.
- New adjustable head harness and yoke design provides greater stability.
- Easy and secure fitting with drop-down feature for added convenience.
- Head harness designed to accommodate other PPE, including grinding or welding shields and the 3M Eyewear range.

- Safe, secure bayonet filter attachment system with cost effective replacement filters.
- 3 sizes (small 7501, medium 7502, large 7503).
- · Colour coded sizes for easier identification.
- Nominal Face piece weight: 130-140 grams.

#### **Applications**

The 7500 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 provides protection against dusts, mists and fumes – all particulates.

- The 2000 Series particulate filters fit directly onto the respirator.
- The 6035 & 6038 are encapsulated P2/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 Hydrogen Fluoride, nuisance levels organic vapour and acid gas.

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



<sup>\*</sup> Provide P3 protection only with a full facepiece respirator. Provides P2 protection with half facepiece respirator.

# **Gas and Vapour Filters:**

Filter	Image	Standard	Class	Hazard
6051 or 6055		AS/NZS 1716:2012	A1 A2	Organic Vapours (b.pt. > 65°C)
6054		AS/NZS 1716:2012	K1	Ammonia & organic ammonia derivatives
6057		AS/NZS 1716:2012	ABE1	Combination organic vapours (b. pt. > 65°C), inorganic & acid gases
6059		AS/NZS 1716:2012	ABEK1	Combination organic vapours (b. pt. > 65° C), inorganic & acid gases & Ammonia
6075		AS/NZS 1716:2012	A1 + Formaldehyde	Organic Vapours (b. pt. > 65°C) & Formaldehyde
6096		AS/NZS 1716:2012	A1E1HgP3*	Organic Vapours (b. pt. > 65°C), Inorganice Gases, Phosphine, Mercury vapour, Chlorine & Particulates
60926		Performance tested to AS/NZS 1716	A1B1E1K1 Form/HF P3*	Organic Vapours (b. pt. > 65°C), Inorganice Gases, Phosphine, Mercury vapour, Chlorine, formaldehyde, Hydrogen Flouride & Particulates

# **Particulate Filters:**

Filter	Image	Standard	Class	Hazard
5925 5935		AS/NZS 1716:2012	P2 P3*	Provides protection against dusts, mists and fumes – all particulates Note: requires 501 retainer to attach to 6000 gas/vapour cartridges
2125 2135	20 200 1 10 200 1	AS/NZS 1716:2012	P2 P3*	Provides protection against dusts, mists and fumes – all particulates
2128 2138	See 212 See	AS/NZS 1716:2012	GP2 GP3*	Particulates, Low vapour pressure (<1.3Pa @25 degrees Celsius) organic compounds, Ozone & nuisance levels of Organic Vapours & Acid Gases
6035	H. T.	AS/NZS 1716:2012	P3*	Particulates
6038		AS/NZS 1716:2012	P3*HF	Particulates, Hydrogen Fluoride at 30ppm, Nuisance levels of Organic Vapours & Acid Gases

<sup>\*</sup> Provide P3 protection only with a full facepiece respirator. Provides P2 protection with half facepiece respirator.

#### **Materials**

Part	Material
Face Seal	Silicone
Head Harness	Polyethylene
Head Strap	Woven polyester/neoprene
Inhalation Valve	Silicone Rubber
Exhalation Valve	Silicone Rubber
Gasket	Silicone Rubber

#### **Approvals**

These respirators have been produced to comply with the requirements of the Australian /New Zealand Standard AS/ NZS 1716:2012 under an agreed production certification scheme operated during manufacture in accordance with the SAI Global Standards Mark programme.

#### **Standards**

These products have been assessed and found compliant with the relevant Australian/New Zealand Standard AS/NZS 1716:2012:

- 7500 Series Half Facepieces
- 6000 Series Gas and Vapour filters
- 2000 and 5000 Series and 6035, 6038 Particulate filters

## **Correct Usage**

# When the 7500 Series Half Facepiece 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 10 x the Workplace Exposure Standard(WES)/ Workplace Exposure Limit (WEL) or 1000ppm whichever value is lower, and exposures less than the relevant IDLH (Immediately Dangerous to Life and Health) value.
- 6075 offers protection against organic vapour (as above) and 10x WES/WEL 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 7500 Series Half Facepiece is fitted with Particulate Filters:

- 2000, 5000 and 6000 series particulate filters may be used in concentrations of particulates up to 10 x WES/WEL, and exposures less than the relevant IDLH (Immediately Dangerous to Life and Health) value.
- 2128 and 2138 filters offer protection against organic compounds with low vapour pressures (<1.3Pa @ 25 degrees celsius) in concentrations up to 10 x WES/WEL, and exposures less than the relevant IDLH (Immediately Dangerous to Life and Health) value.
- 2128 and 2138 filters may be used to protect against ozone up to 10 x WES/WEL and offers relief from acid gases and organic vapours at levels below the WES/WEL, and exposures less than the relevant IDLH (Immediately Dangerous to Life and Health) value.

 6038 offers protection against 30ppm Hydrogen Fluoride and offers relief from ozone, acid gases and organic vapours at levels below the WES/WEL, and exposures less than the relevant IDLH (Immediately Dangerous to Life and Health) value.

## **Cleaning and Storage**

Cleaning is recommended after each use.

- Disassemble by removing the filters, head straps and other parts.
- 2. Clean and sanitise the facepiece (excluding filters) using 3M™ 504 Respirator Cleaning Wipes or immersing in warm cleaning solution 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 (30 mL household bleach in 7.5L of water) or other disinfectant.
- Rinse in fresh, warm water and air-dry in noncontaminated atmospheres.

- ⚠ Do not autoclave.

#### Maintenance

The 7500 half facepiece must be inspected before each use to ensure it is in proper operating condition. Any damaged or defective part must be replaced before use.

The following procedure is suggested.

- Check the face facepiece for cracks, tears and dirt. Examine the inhalation valves for signs of distortion, cracking or tearing.
- 2. Check that the head straps are intact and have good elasticity.
- Examine all plastic parts and gaskets for signs of cracking or fatigue and replace if necessary.
- 4. Remove the exhalation valve cover and examine the exhalation valve and seat for sign of dirt, distortion, cracking, or tearing. Replace the valve if necessary. Secure the valve cover prior to use.

#### **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, 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-2100 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.

- 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.
- Use strictly in accordance with respirator and filter user instruction leaflet.
- 10.In case of intended use in explosive atmospheres, contact 3M technical service.

## **Fitting Instructions**

#### **Standard Suspension**

- 1. Adjust head cradle size to fit comfortably on head.
- 2. Place the respirator over the mouth and nose.
- 3. Pull the head harness over the crown of the head.





#### **Drop Down Suspension**

- 1. Adjust head harness on face piece as shown.
- 2. Adjust head cradle size to fit comfortably on head.
- 3. While holding head harness strap ends with one hand, slide the face piece up onto your face.



#### **Both Types of Suspension**

- 1. Take the bottom straps in both hands, place them at the back of the neck and hook them together.
- Tighten the top straps first by pulling on ends to achieve a comfortable and secure fit as shown.
- Tighten bottom straps using the rear adjustments (strap tension may be decreased by pushing out on back side of buckles).

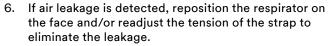


## **Fit Check**

Perform a positive and/or negative pressure face fit check.

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

- Place the palm of the hand over the exhalation valve cover and exhale gently.
- 5. If the facepiece bulges slightly and no air leakage between the face piece is
  - detected, a proper fit has been achieved.



- 7. Repeat the above face fit check.
- 8. 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).

- Push the filter cover down (6035 and 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.
- If the facepiece collapses slightly, a proper fit has been achieved.
- 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.
- If you cannot achieve a proper fit, do not enter the contaminated area. See your supervisor.







<sup>\*3</sup>M definition minimum 19.5% by volume oxygen

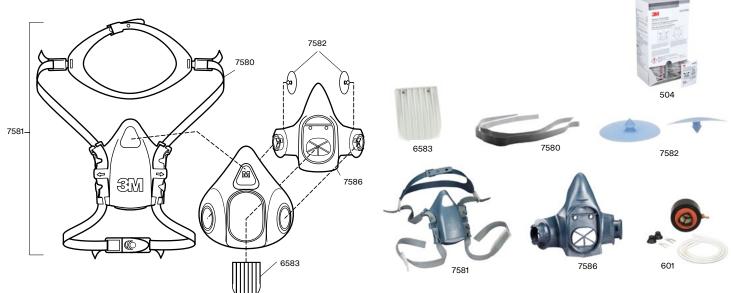
# **Ordering Information**

		Availa	bility		
SAP ID	Legacy ID	AUS	NZ	Model #	Description
7000104176	XA007709323	•	•	7501	3M™ Half Facepiece Reusable Respirator 7501, Small, 10 Each/Case
7000104177	XA007709331	•	•	7502	3M <sup>™</sup> Half Facepiece Reusable Respirator 7502, Medium, 10 Each/ Case
7000104178	XA007709349	•	•	7503	3M™ Half Facepiece Reusable Respirator 7503, Large, 10 Each/Case



# 7500 Series Kits

		Availa	bility			
SAPID	Legacy ID	AUS	NZ	Model #	Description	
7012874773 (AUS) 7012886950 (NZ)	AT010623372 (AU) NT019446581 (NZ)	•	•	7551	3M <sup>™</sup> Spraying Respirator Kit 7551, A1P2, Small, 2 Kits/Case	
7012887713 (AUS) 7012867515 (NZ)	AT010623380 (AU) NT019446573 (NZ)	•	•	7551	3M <sup>™</sup> Spraying Respirator Kit 7551, A1P2, Medium, 2 Kits/Case	
7012888953 (AUS) 7012882652 (NZ)	AT010623398 (AU) NT019446565 (NZ)	•	•	7551	3M™ Spraying Respirator Kit 7551, A1P2, Large, 2 Kits/Case	
7012868205 (AUS) 7012869045 (NZ)	AT010590654 (AU) NT019447993 (NZ)	•	•	7528	3M™ Welding Respirator Kit 7528, GP2, Medium, 2 Kits/Case	
7012866966	AT010601592	•	•	7535	3M <sup>™</sup> Asbestos/Dust Respirator Kit 7535, P2/P3, Small, 2 Kits/Case	
7012884104	AT010601600	•	•	7535	3M <sup>™</sup> Asbestos/Dust Respirator Kit 7535, P2/P3, Medium, 2 Kits/Case	
7012869567	AT010601618	•	•	7535	3M <sup>™</sup> Asbestos/Dust Respirator Kit 7535, P2/P3, Large, 2 Kits/Case	



**Spare Parts** 

		Availa	bility		
SAP ID	Legacy ID	AUS	NZ	Model #	Description
7000127455	70071534294	•	•	7580	3M™ Respirator Replacement Strap 7580 40 EA/Bag
7000002157	AT010561499 (AU) 70071042603 (NZ)	•	•	7581	3M <sup>™</sup> Head Harness Assembly 7581, Respiratory Protection System Component, 5 ea/Bag, 4 Bags/Carton
7000002158	AT010561507 (AU) 70071042611 (NZ)	•	•	7582	3M <sup>™</sup> Inhalation Valve 7582, Respiratory Protection Replacement Part
7100018862	AT010561515 (AU) 70071668183 (NZ)	•	•	6583	3M™ Rugged Comfort Exhalation Valve 6583, 10/Case
7000002160	AT010561523 (AU) 70071042637 (NZ)	•	•	7586	3M <sup>™</sup> Cartridge Filter Holder 7586, Respiratory Protection System Component
7000001938	AT010587411 (AUS) 70070317139 (NZ)	•	•	504	3M™ Respirator Cleaning Wipe 504, 100 ea/Carton
7000001945	70070406544	•	•	601	3M™ Fit Test Adapter 601, 1 ea/Case

Please note not all parts and accessories are stocked or active in our system. Please contact 3M sales rep or customers service for further clarification.

A 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 Customer Service Australia 1300 363 565 3msupport.safety.au@mmm.com, New Zealand 080252 627 3msupport.safety.nz@mmm.com

#### Warning

Selection of the most appropriate respiratory protective equipment (RPE) will depend on the particular situation and should be made only by a competent person knowledgeable of the actual working conditions and the limitations of RPE. Details regarding performance and limitations are set out in this technical bulletin as well as on the respirator packaging and user instructions. Before using any respirator, the wearer must read and understand the user instructions for the product. Specific legislation must be observed. If in doubt, contact a safety professional or 3M.

#### **Important Notice**

To the extent permitted by law, 3M shall not be liable for any loss or damage including any loss of business, loss of profits, or for any indirect, special, incidental or consequential loss or damage arising from reliance upon any information herein provided by 3M. Nothing in this statement will be deemed to exclude or restrict 3M's liability for death or personal injury arising from its negligence.





