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3M™ Half Facepiece Reusable Respirator, 6500QL Series

Technical Data Sheet



Main Features

The 3M™ Half Face Respirator 6500QL Series have been designed with tough and dirty work environments in mind. The 6500QL Rugged Comfort Half Facepieces are made from durable silicone overmoulded onto a rigid support, for a soft but stable feel. The unibody facepiece design simplifies cleaning and maintenance by minimising crevices and replacement components. These facepieces can be used with any of the 3M™ Filters and Cartridges 2000 Series, 5000 Series, 6000 Series, 6035 and 6038. The 6500QL series features the unique Quick Latch drop-down feature, which can be operated with only one hand.

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 main features include:

- Adjustable Head Harness Assembly.
- Silicone Face seal, providing comfort and stability with a soft but firm face seal.
- Flexible bayonet system for connection to a wide range of 3M™ gas, vapour and particulate filters.
- Over moulded/Low-Profile Design Simplified cleaning and maintenance with fewer parts and crevices.
- Valve Cover Design that directs exhaled breath and moisture downward and allows for an easy positive pressure seal check
- Advanced half facepieces design for low profile and a wide field of view.
- The 6500QL Series comes in 3 sizes (small – 6501QL, medium – 6502QL, large – 6503QL).



Quick Latch

Applications

The 6500QL 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 fit directly onto the respirator (except for the 6098 and 6099 which cannot be used on a half facepiece respirator).

Particulate filters only: These filters provides protection against dusts, mists and fumes – all particulates.

- The 3M™ Particulate Disc Filters 2000 series fit directly onto the respirator.
- The 6035 & 6038 are encapsulated P2/P3 filters and fit directly onto the respirator.

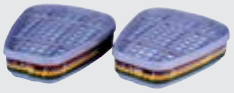
Combination of Gas & Vapour and Particulate filters:

- The 3M™ Particle Filters 5000 Series can be used with 6000 Series Gas and Vapour Filters using 501 retainers - excluding the 6035, 6038, 6096 or 60926.
- The 6096 and 60926 have 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.



* 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 & 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), Sulfur dioxide, Phosphine, Mercury vapour & Particulates
60926		Performance tested to AS/NZS 1716:2012	A1B1E1K1 Form/HF P3*	Organic Vapours (b. pt. > 65°C), Inorganic Gases, 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		AS/NZS 1716:2012	P2 P3*	Provides protection against dusts, mists and fumes – all particulates
2128 2138		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		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

* Provide P3 protection only with a full facepiece respirator. Provides P2 protection with half facepiece respirator.

Standards

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

- 6500QL Series Half Face Facepieces and 2000 and 5000 Series Particulate Filters and 6000 Series Gas and Vapour filters.
- 6000 Series Gas and Vapour filters
- 2000 and 5000 Series and 6035, 6038 Particulate filters

Correct Usage

When the 6500QL Series Half Face 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 10x the Workplace Exposure Standard(WES)/ Workplace Exposure Limit (WEL) or 1000ppm, whichever value is lower.
- 6075 offers protection against organic vapours (as above) and up to 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 (e.g. no smell or taste).

When the 6500QL Series Half Face Facepiece is fitted with Particulate Filters:

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

Cleaning and Storage

- Cleaning is recommended after each use.
- Disassemble by removing the filters, head straps and other parts.
- Clean and sanitise the facepiece (excluding filters) using 3M™ 504 Cleaning Wipes or immersing in warm cleaning solution (<500C) 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 non-contaminated atmospheres.

⚠ **Water temperature should not exceed 50°C.**
⚠ **Do not use cleaning agents that contain lanolin or other oils.**
⚠ **Do not autoclave.**

Maintenance

The 6500QL 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.

1. 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.
3. 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

1. These respirators do not supply oxygen. Do not use in oxygen deficient areas.*
2. Do not use for respiratory protection against contaminants with poor warning properties, are unknown or immediately dangerous to life and health (IDLH) or contaminants which generate high heats of reaction with chemical filters.
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 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 6500QL Series

1. Adjust head cradle size as needed to fit comfortably on head.
2. Place the respirator over the nose and mouth, fitting it comfortably on the bridge of the nose, then pull the head harness over the crown of the head. **(Fig.1)**
3. Take a bottom strap in each hand, place the straps at the back of the neck and hook the straps together. **(Fig. 2)**
4. Tighten the top head harness first by pulling on the ends of the straps to achieve a comfortable and secure fit. Tighten the bottom straps in a similar manner. (Strap tension may be decreased by pushing out on the back side of the buckles). **(Fig. 3)**

Do not over tighten the head straps.
Always follow User Instructions.



Fig. 1


Fig. 2


Fig. 3

Fitting Instructions 6500 QL Series

IMPORTANT NOTICE: After initial donning of the 6500QL Quick Latch Half Facepiece, once straps are adjusted to proper length, subsequent donning can be done with quick latch initially in open or closed position. To don with the quick latch in the open position, follow steps as above for fitting the head harness, then raise the facepiece to the in-use position. Always follow instructions in User Instructions supplied with the product.

6500 QL - Quick Latch Operation

TO OPEN QUICK LATCH: Grasp the latch at chin level and pull up.




TO CLOSE QUICK LATCH: Grasp the face piece with your thumb on the bottom of the face piece and your first two fingers on top of the latch. Place the face piece over your nose and mouth while pushing down on the latch.




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 (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. If air leakage is detected, reposition the respirator on the face and/or re-adjust the tension of the straps to eliminate the leakage.
3. Repeat the above face fit check. If you cannot achieve a proper fit, do not enter the contaminated area. See your supervisor.

Materials

Part	Material
Face Seal	Silicone Rubber
Overmould	Nylon
Inhalation Valve	Polyisoprene
Exhalation Valve	Nylon/Silicone
Straps	Silicone Rubber
Head Cradle	Polyethylene with Spandex and Polyester straps
Buckles	Polypropylene
Quick Latch	Glass-filled Nylon

The 6502 (Medium) facepiece weighs 100 gms.

Ordering Information

SAP ID	Legacy ID	Availability AUS	Availability NZ	Model #	Description
7100020699	70071668134	•	•	6501QL	3M™ Rugged Comfort Quick Latch Half Facepiece Reusable Respirator 6501QL, Small, 10 Each/Case
7100018994	70071668142	•	•	6502QL	3M™ Rugged Comfort Quick Latch Half Facepiece Reusable Respirator 6502QL, Medium, 10 Each/Case
7100018995	70071668159	•	•	6503QL	3M™ Rugged Comfort Quick Latch Half Facepiece Reusable Respirator 6503QL, Large, 10 Each/Case



6528QL



6551QL

6528QL

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6551QL

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6535QL

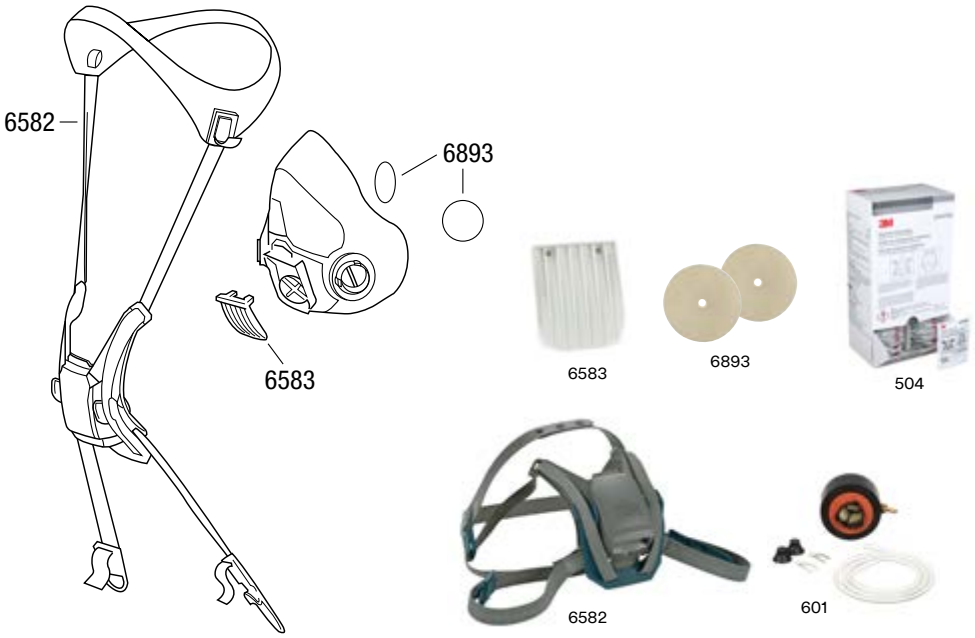
6535QL

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6500QL Series Kits

SAP ID	Legacy ID	Availability AUS	Availability NZ	Model #	Description
7012877075	AT010623406	•		6528QL	3M™ Welding/Particulate Respirator Kit 6528QL, GP2, Small, 2 ea/Case
7012886661 (AUS) 7012867035 (NZ)	AT010623414 (AUS) NT019446607 (NZ)	•	•	6528QL	3M™ Welding/Particulate Respirator Kit 6528QL, GP2, Medium, 2 ea/Case
7012890637 (AUS) 7012881003 (NZ)	AT010623422 (AUS) NT019446599(NZ)	•	•	6528QL	3M™ Welding/Particulate Respirator Kit 6528QL, GP2, Large, 2 ea/Case
7012885945 (AUS) 7012887000 (NZ)	AT010623794 (AUS) AT010787870(NZ)	•	•	6551QL	3M™ Spraying Respirator Kit 6551QL, A1P2, Small, 2 ea/Case
7012885539 (AUS) 7012869457 (NZ)	AT010623802 (AUS) AT010787862(NZ)	•	•	6551QL	3M™ Spraying Respirator Kit 6551QL, A1P2, Medium, 2 ea/Case
7012867749 (AUS) 7012886518 (NZ)	AT010623810 (AUS) AT010782178(NZ)	•	•	6551QL	3M™ Spraying Respirator Kit 6551QL, A1P2, Large, 2 ea/Case
7012881491 (AUS) 7012881573 (NZ)	AT010782475 (AU) NT019449288(NZ)	•	•	6535QL	3M™ Construction Respirator Kit 6535QL, P2, Small, 2 Kits/Case
7012884402(AUS) 7012882831 (NZ)	AT010782483 (AUS) NT019448009 (NZ)	•	•	6535QL	3M™ Construction Respirator Kit 6535QL, P2, Medium, 2 Kit/Case
7012890982 (AUS) 7012881077 (NZ)	AT010782491 (AUS) NT019448017 (NZ)	•	•	6535QL	3M™ Construction Respirator Kit 6535QL, P2, Large, 2 Kits/Case



Spare Parts

SAP ID	Legacy ID	Availability AUS	Availability NZ	Model #	Description
7100018862	70071668183	•	•	6583	3M™ Rugged Comfort Exhalation Valve 6583, 10/Case
7000002049	70070710986	•	•	6893	3M™ Inhalation Valve 6893, System Component 200 EA/Case
7100020701	70071668175	•	•	6582	3M™ Quick Latch Head Harness Assembly 6582QL, 20/Case
7000001945	70070406544	•	•	601	3M™ Fit Test Adapter 601, 1 ea/Case
7000001938	AT010587411 (AUS) 70070317139 (NZ)	•	•	504	3M™ Respirator Cleaning Wipe 504, 100 ea/Carton

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.

⚠ **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

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QR-CAT-RR
Reusable Respirator Catalogue Section

QR-CAT-FULL
Full Personal Safety Division Catalogue

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