

3M™ Versaflo™ TR-600 & TR-800 Filters

Technical Data Sheet

Description

The following filters are made to be used with the Versaflo™ TR-600 and TR-800 Powered Air Purifying Respirators (PAPR) for protection against particulates and some specified gases and vapours. These filters used with the TR-602E or TR-802E Powered Air Turbo are part of a respirator system compliant with the Australian/New Zealand Standard AS/NZS1716:2012

Specifications

The following filter options are available for the TR-602E/TR-802E+ Powered Air Turbo's:

- TR-6710ANZ PAPR-P3 For use against all particulates
- TR-6310ANZ PAPR-A1P3 For use against all particulates and organic vapours (Boiling Pt >65°C)
- TR-6820ANZ PAPR-P3– For use against all particulate and nuisance level Organic Vapours and Acid Gases + hydrogen Fluoride gas up to 10 x WES
- TR-6580ANZ PAPR-A1B1E1HgP3 For use against all particulate, Organic Vapours (Boiling Pt >65°C), Acid Gases, Sulphur Dioxide and mercury vapour*** and nuisance level ammonia
- TR-6600 Prefilter Used to extend the service life of the main particle filter

Application

These filters are designed to capture airborne particulates (thermally and/or mechanically generated particulates) of all sizes as well as certain gases and vapours as rated. The TR-6820ANZ also has a limited capability to adsorb organic vapours or acid gases. These are for use against nuisance levels of these gas/vapours ie airborne concentrations that are below the relevant Workplace Exposure Standard for the specific gas/vapours involved.

Materials

The following materials are used in this filter range:

- Filter Body - ABS
- Gas/Vapour Filter element - Activated Carbon
- Particulate Filter Element - Fibreglass



Standards

Complies with AS/NZS 1716:2012 (Respiratory protective devices). Use in accordance with AS/NZS 1715 (Selection, use and maintenance of respiratory protective equipment).

Service Life

The service life of these filters will vary according to the time of use, the selected flow rate and level of exposure to airborne particulates and/or gas/vapours. There is a visual and audible alarm on the control panel of the air filter unit (and a vibratory alarm for the TR-602E only) and an indication of current condition of the particle filter. When the particle filter full warning indicates, the filter will need to be replaced with a new one. A filter change schedule for the gas/vapour cartridges must be determined by the workplace.

Disposal

If disposal of parts is required, this should be undertaken in accordance with local health and safety and environmental regulations.



Technical Specifications

When selected and used in accordance with the standard (AS/NZS 1715) these filters are capable of providing the following protection when fitted with one of the appropriate cartridge filters, the Versaflo™ TR-602E/TR-802E PAPR and headtop combinations will give the wearer:

TR-6710ANZ PAPR-P3

- A protection factor of 50 against mechanically and thermally generated particles with a loose fitting head top/hood (AS/NZS 1715).
- A protection factor of 100+ against mechanically and thermally generated particles with a tight fitting full facepiece (AS/NZS 1715).
- A protection factor of 10 against mechanically and thermally generated particles with a tight fitting half facepiece.

TR-6310ANZ PAPR-A1P3 -For use against all particulates and organic vapours (Boiling Pt >65°C)

- A protection factor of 50 against mechanically and thermally generated particles and a protection factor of 10 against organic gas/vapours with boiling point >65°C with a loose fitting head top/hood.
- A protection factor of 100+ against mechanically and thermally generated particles and a protection factor of 10 against organic gas/vapours with boiling point >65°C with a tight fitting full facepiece.
- A protection factor of 10 against mechanically and thermally generated particles and a protection factor of 10 against organic gas/vapours with boiling point >65°C with a tight fitting half facepiece.

TR-6820ANZ – PAPR-P3– For use against all particulate and nuisance level* Organic Vapours and Acid Gas + Hydrogen Fluoride gas up to 10 x WES

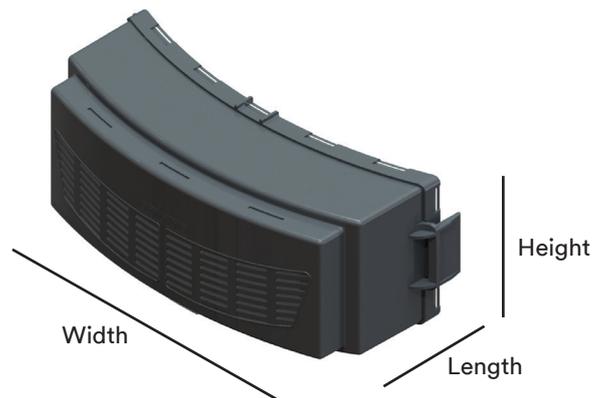
- A protection factor of 50 against mechanically and thermally generated particles and Hydrogen Fluoride gas up to 10 x Exposure Std with a loose fitting head top/hood.
- A protection factor of 100+ against mechanically and thermally generated particles with a tight fitting full facepiece. Hydrogen Fluoride gas up to 10 x Exposure Std on either loose fitting headtop or tight fitting full face respirator
- A protection factor of 10 against mechanically and thermally generated particulates and Hydrogen Fluoride gas up to 10 x Exposure Std on a tight fitting half facepiece.

TR-6580ANZ – PAPR-A1B1E1HgP3

- A protection factor of 50 against mechanically and thermally generated particles and a protection factor of 10 against organic gas/vapours with boiling point >65°C, acid gases, sulfur dioxide, mercury with a loose fitting head top/hood.
- A protection factor of 100+ against mechanically and thermally generated particles and a protection factor of 10 against organic gas/vapours with boiling point >65°C, acid gases, sulphur dioxide and mercury with a tight fitting full facepiece.
- A protection factor of 10 against mechanically and thermally generated particles and a protection factor of 10 against organic gas/vapours with boiling point >65°C, acid gases sulphur dioxide and mercury with a tight fitting half facepiece.

Filter Dimensions

The dimensions refer to the following



Length refers to the highest point of the curve and to the end of the clip

TR-6710ANZ

Width	242mm
Height	107mm
Length	61mm
Weight	0.23kg

TR-6310ANZ

Width	242mm
Height	107mm
Length	104mm
Weight	0.7kg

TR-6820ANZ

Width	242mm
Height	107mm
Length	72mm
Weight	0.27kg

TR-6580ANZ

Width	242mm
Height	107mm
Length	111mm
Weight	0.79kg

Filter Covers

The following filter and filter cover options are available for the TR-602E/TR-802E Powered Air Turbo's:

Model #	Rating	Filter Cover
TR-6710ANZ – for particulates only	PAPR-P3	TR-6700FC
TR-6310ANZ – for particulates and Organic Vapours (B.Pt. >65C)	PAPR-A1P3	TR-6300FC
TR-6820ANZ – for particulates and nuisance level* Organic Vapours and Acid Gas + Hydrogen Fluoride gas up to 10 x Exposure Std	PAPR-P3	TR-6800FC
TR-6580ANZ – For use against all particulate, Organic Vapours (B.Pt. >65C), nuisance level ammonia, Acid Gases, Sulphur Dioxide and mercury vapour***	PAPR-A1B1E1HgP3	TR-6500FC
TR-6600	Pre-filter	-

Filter covers provide protection to the main filters but are not required for use, unless using a prefilter and/or spark arrestor.

Shelf Life, Storage and Transportation

Shelf life of the unopened products is as follows from date of manufacture as indicated on the filter, when stored correctly.

5 years - TR-6310ANZ, TR-6580ANZ, TR-6710ANZ and TR-6820ANZ

These products should be stored in the packaging provided in dry, clean conditions, away from direct sunlight, sources of high temperature, petrol and solvent vapours. Do not store outside the temperature range -30°C to +50°C or with humidity above 90%. If the product will be stored for an extended period of time before use, the suggested storage temperature is 4°C to 38°C. Before initial use, always check that the product is within the stated shelf life (use by date).

Before initial use, always check that the product is within the stated shelf life. When storing or transporting this product use original packaging provided.

Storing the filters in an airtight container will help prolong the service life by reducing exposure to moisture and contaminants.

As per AS/NZS1715:2009 Section 4.2.5.3, "All classes of gas filter shall be discarded no longer than six months after opening, irrespective of the number of periods of use".

Warnings & Limitations

Particular attention should be given to warning statements where indicated. Proper selection, fit, training, use and appropriate maintenance are essential in order for the product to help protect the wearer from certain airborne contaminants. Failure to follow all instructions on the use of these respiratory protection products and/or failure to properly wear the complete product during all periods of exposure may adversely affect the wearer's health, lead to severe or life threatening illness or permanent disability.

Always be sure that the complete product is:

- Suitable for the application;
- Fit tested (where required) and fitted correctly;
- Worn during all periods of exposure;
- Replaced when necessary.

For suitability and proper use follow local regulations, refer to all information supplied or contact an occupational hygienist, safety professional or 3M representative on the Tech Assist Helpline - Australia 1800 024 464 or New Zealand 0800 364 357.

Use this respirator system strictly in accordance with all User Instructions:

- Do not submerge the filters in liquid.
- Do not use for respiratory protection against unknown atmospheric contaminants or when concentrations of contaminants are unknown or immediately dangerous to life or health (IDLH).
- Do not use in atmospheres containing <19.5% oxygen. (3M definition. Individual countries may apply their own limits on oxygen deficiency. Seek advice if in doubt).
- Do not use against contaminants with poor warning properties.
- The filter cannot be cleaned and should be replaced if excessively clogged.
- Keep inner filter seal clean. The seal can be cleaned with fresh water but ensure that water does not enter the filter.
- Never attempt to clean filters by knocking or blowing out accumulated material.

Leave the contaminated area immediately if:

- Any part of the system becomes damaged.
- Airflow to the face piece decreases or stops.
- Breathing becomes difficult or increased breathing resistance occurs.
- Dizziness or other distress occurs.
- You smell or taste contaminants or irritation occurs.
- Never alter, modify or repair this device.
- These products do not contain components made from natural rubber latex.

NOTE: Save all user instructions for continuing reference.

Ordering Information

3M Code	Model #	Description
70071622073	TR-6500FC	Filter Cover** to Suit Versaflo™ TR -6580ANZ
UU008996223 NZ: NT070007777	TR-6580ANZ	A1B1E1HgP3 Filter For Organic Vapours, Acid Gases, Inorganic vapours and Mercury vapour*** including a P3 Filter
70071622065	TR-6300FC	Filter Cover** to Suit Versaflo™ TR -6310ANZ
UU008996215 NZ: NT070007769	TR-6310ANZ	A1P3 Filter For Organic Vapours with Boiling Pt >65°C
70071618246	TR-6600	Versaflo™ Pre-Filter
70071622040	TR-6800FC	Filter Cover** to Suit Versaflo™ TR -6820ANZ Nuisance Odour* P3 Filter
UU008996207	TR-6820ANZ	PAPR-P3 Filter with Nuisance Odour*
70071618261	TR-6700FC	Filter Cover** to Suit Versaflo™ TR-6710ANZ
UU008996199 NZ: NT070007736	TR-6710ANZ	PAPR-P3 High Efficiency Filter Versaflo™

* "Nuisance level" refers to airborne concentrations below the relevant Workplace Exposure Level.

**NB: Air filter units can be used without filters covers if so desired. Cover is required if needing to use prefilter and/or spark arrestor or if showering while wearing the air filter unit.

***These filters have a maximum use time of 50 hours against mercury vapour.

Important Notice

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