Technical Datasheet



3M[™] Aura[™] 9300+ Series Particulate Respirators

Description

The 3M[™] Aura[™] 9300+ Series Particulate Respirators provide effective respiratory protection for use in industries where workers will be exposed to dust particles and/or non-volatile liquid particles.

- Tested and certified to AS/NZS 1716:2003
- Foldable, easy to store, proprietary 3-panel design accommodates facial movement for wearer comfort
- 3MTM Low Breathing Resistance Filter Technology gives effective filtration with low breathing resistance for consistent high quality performance
- Sculpted nose panel conforms to the nose and contours of the face and helps improve compatibility with 3M eyewear
- Innovative chin tab designed for ease of donning and adjustment to help achieve a comfortable fit
- 3M[™] Cool Flow[™] exhalation valve offers improved comfort in hot humid environments and/or where work is hard and physical*
- Large, soft nose foam is comfortable on the skin
- Individual hygienic packaging protects the respirator from contamination before use
- Even strap pressure improves comfort on the neck, face and head with a secure feel
- Coloured headbands for easy identification: yellow for P1and blue for P2

Materials

The following materials are used in the production of the 3M[™] Aura[™] 9300+ Series Particulate Respirators:

• Straps	Polyisoprene
 Staples 	Steel
Nose Foam	Polyurethane
Nose Clip	Aluminium
• Filter	Polypropylene
Valve*	Polypropylene
Valve diaphragm*	Polyisoprene

These products do not contain components made from natural rubber latex.

Maximum mass of products:

- Unvalved (9310+ & 9320+) = 10q
- Valved (9312+ & 9322+) = 15g

Standards

These products meet the requirements of Australian / New Zealand Standard AS/NZS 1716:2003 and the recently amended European Standard EN 149:2001 + A1:2009, filtering facepiece respirators for use against particles. They should be used to protect the wearer from solid and non-volatile liquid particles only.

Products are classified by filtering efficiency and maximum total inward leakage performance (P1, P2 and P3).

Performance tests in EN149:2001 + A1:2009 include filter penetration; extended exposure (loading) test; flammability; breathing resistance and total inward leakage. Reusable products are also subjected to cleaning, storage and mandatory clogging resistance tests (clogging is optional for non reusable products). A full copy of AS/NZS 1716:2003 and/or EN 149:2001+A1:2009 can be purchased from your national standards body.

EN 149:2001 + A1:2009 Designations:

R = Reusable

NR = Non reusable (single shift use only)

D = Meets the clogging resistance requirements

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.

Applications

These respirators are suitable for use in concentrations of solid and non-volatile liquid particles up to the following limits:

Model	AS/NZS 1716 Classification	Exhalation Valve	Protection Factor x ES
9310+	P1	Unvalved	up to 10x
9312+	P1	Valved	up to 10x
9320+	P2	Unvalved	up to 10x
9322+	P2	Valved	up to 10x

ES = Exposure Standard

Respiratory protection is only effective if it is correctly selected, fitted and worn throughout the time when the wearer is exposed to hazards.



Selection Guide

		FFP1	FFP2	FFP3	Organic Vapour	Acid Gas	Welding
Painting,	Solvent-Based - brush / roller applied			•	•		
Varnishing, Spraying, Coating, Mixing	Solvent-Based - spray applied		Ask 3M				
	Water-Based - brush / roller / spray applied			•	•		
	Wood Preservatives			•	•		
	Powder Coating			•			
Sanding,	Rust, most Metals, Filler, Concrete, Stone	•					
Stripping, Grinding,	Cement, Wood, Steel,		•				
Cutting, Drilling	Paints, Varnish, Anti-rust coating		•				
Dilling	Stainless Steel, Anti-fouling varnish			•			
	Resins, Reinforced plastics (carbon / glass fibre)		•	•			
Construction /	Scabbling, Shot-creting (concrete dust)	•	•	•			
Maintenance	Plastering, Rendering, Cement mixing	•	•	•			
	Demolition	•	•				•
	Groundwork, Earth moving, Piling, Underpinning		•	•			
	Spray foam, Loft Insulation		•	•			
Metal working /	Welding, Soldering		•	•			•
Foundries	Electro-plating		•	•		•	
	Finishing, Slotting, Drilling, Riveting, Machining		•	•			
	Oxyacetylene cutting		•	•			
	Molten metal handling, Smelting		•	•		•	
Cleaning /	Disinfection, Cleaning		•	•	•	•	
Waste Removal	Waste removal		•	•	•		
	Asbestos handling			•			
	Asbestos removal		Ask 3M				
Allergens /	Pollen, Animal dander	•					
Biohazards	Mould / Fungus, Bacteria**, Viruses		•	•			
	**Tuberculosis			•			
	Diesel exhaust / Smoke		•				
Agriculture / Forestry	Handling infected animals, Culling		•	•	•		
	Feeding livestock, Cleaning sheds / harvesters	•	•	•			
	Straw chopping, Composting, Harvesting		•	•			
	Pesticides, Insecticides (crop spraying)		•	•	•		
Mining /	Tunnelling, Drilling, Grinding, Excavation		•	•			
Quarrying	Pumping, Dredging, Washing		•	•			
	Cutting, Sawing		•	•			
	Changing Filters		•	•			
Other	Inks, Dyes, Solvents, Chemicals		•	•	•		
Industrial Applications	Powdered Additives / Chemicals		•	•	•		
	Pharmaceuticals		•	•	•		
	Rubber / Plastics processing		•	•	•		
	Oil and Gas Extraction / Processing		•	•	•	•	•
	Pottery, Ceramics			•			
	Wood / Paper Mills		•	•			

This selection guide is only an outline designed to focus on products which may be appropriate for typical applications - it should not be used as the only means of selecting a product. Selection of the most appropriate personal protective equipment (PPE) will depend on the particular situation and should be made only by a competent person knowledgeable of the assessed risks, actual working conditions and limitations of PPE. Details regarding performance and limitations are set out on the product packaging and user information. If in doubt, contact a safety professional or 3M.

Storage and Transportation

The $3M^{TM}$ Aura TM 9300+ Series Particulate Respirators have a shelf life of 5 years. End of shelf life is marked on the product packaging. Before initial use, always check that the product is within the stated shelf life (use by date). Product should be stored in clean, dry conditions within the temperature range: -20°C to $+25^{\circ}\text{C}$ with a maximum relative humidity of <80%. When storing or transporting this product use original packaging provided.

Disposal

Contaminated products should be disposed as hazardous waste in accordance with national regulations.

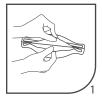
Fitting Instructions

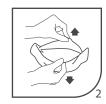
See Figure 1.

Before fitting device, ensure hands are clean.

- With reverse side up and using the tab, separate top and bottom panels to form a cup shape. Bend slightly at centre of the noseclip.
- 2. Ensure both panels are fully unfolded.
- Cup respirator in one hand with open side towards face. Take both straps in other hand. Hold respirator under chin, with nosepiece up, and pull straps over head.
- 4. Locate the upper strap across the crown of the head and the lower strap below the ears. Straps must not be twisted. Adjust top and bottom panels for a comfortable fit, ensuring panels and chin tab are not folded in.
- 5. Using both hands, mould noseclip to the shape of the lower part of the nose to ensure a close fit and good seal. Pinching the noseclip using only one hand may result in less effective respirator performance.
- **6.** The seal of the respirator on the face should be fit-checked before entering the workplace.

Figure 1













Fit Check

- 1. Cover the front of the respirator with both hands being careful not to disturb the fit of the respirator.
- (a) UNVALVED respirator EXHALE sharply;
 (b) VALVED respirator INHALE sharply.
- 3. If air leaks around the nose, re-adjust the noseclip to eliminate leakage. Repeat the above fit check.
- If air leaks at the respirator edges, work the straps back along the sides of the head to eliminate leakage. Repeat the above fit check.

If you CANNOT achieve a proper fit DO NOT enter the hazardous area. See your supervisor.

Users should be fit tested in accordance with AS/NZS 1715. For information regarding fit testing procedures, please contact 3M.

Product Range



9310+ respirator



9312+ respirator



9320+ respirator



9322+ respirator

▲ Warnings and Use Limitations

- Always be sure that the complete product is:
 - Suitable for the application:
 - Fitted correctly:
 - Worn during all periods of exposure;
 - Replaced when necessary.
- Proper selection, 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.
- 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 3M Australia 1800 024 464, 3M New Zealand 0800 364 357.
- Before use, the wearer must be trained in use of the complete product in accordance with applicable Health and Safety standards/quidance.
- These products do not contain components made from natural rubber latex.
- These products do not protect against gases/vapours.

- Do not use in atmospheres containing less than 19.5% oxygen.
 (3M definition. Individual countries may apply their own limits on oxygen deficiency.
 - Seek advice if in doubt).
- Do not use for respiratory protection against atmospheric contaminants/concentrations which are unknown or immediately dangerous to life and health (IDLH).
- Do not use with beards or other facial hair that may inhibit contact between the face and the product thus preventing a good seal.
- Leave the contaminated area immediately if:
 - a) Breathing becomes difficult.
 - b) Dizziness or other distress occurs.
- Discard and replace the respirator if it becomes damaged, breathing resistance becomes excessive or at the end of the shift.
- Never alter, modify or repair this device.
- In case of intended use in explosive atmospheres, contact 3M.

Important Notice

3M does not accept liability of any kind, be it direct or consequential (including, but not limited to, loss of profits, business and/or goodwill) arising from reliance upon any information herein provided by 3M. The user is responsible for determining the suitability of the products for their intended use. Nothing in this statement will be deemed to exclude or restrict 3M's liability for death or personal injury arising from its negligence.



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