# Technical Datasheet





# Description

The 3M™ Welding Fume Respirators 9925 and 9928 provide lightweight, effective, comfortable and hygienic respiratory protection against dust particles, non-volatile liquid particles and metal fumes whilst resisting clogging for extended use against welding fumes. These respirators additionally provide respiratory protection against Ozone as well as offering relief from nuisance odours.

- Tested and CE Approved to EN 149:2001+A1:2009
- Flame retardant, anti-clog, outer surface minimises the detrimental effects associated with welding splatter.
- Carbon layer provides protection against Ozone gas (10x TLV) and nuisance levels organic vapours (below TLV).
- Soft inner face-seal ring (9928 only) improves face seal, wearer comfort and allows for hygienic cleaning if used for longer than one shift (use 3M<sup>TM</sup> 105 Face Seal Cleaner).
- 4 point adjustable braided headbands help achieve a more secure feel and provide comfort to face, head and neck
- 3M<sup>TM</sup> Advanced Electret Filter Material gives effective filtration with low breathing resistance for consistent high quality performance
- 3M<sup>TM</sup> Cool Flow<sup>TM</sup> exhalation valve offers improved comfort in hot humid environments and/or where work is hard and physical.
- Coloured valve print for easy identification: blue for FFP2.
- Compatible with 3M™ Speedglas™ Welding Headtops.

# **Approvals**

These products meet the requirements of the European Community Directive 89/686/EEC (Personal Protective Equipment Directive) and are thus CE marked. Certification under Article 10, EC Type-Examination and Article 11, EC quality control, has been issued for these products by BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes, MK5 8PP, UK (Notified Body number 0086).

#### **Standards**

These products meet the requirements of 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 (FFP1, FFP2 and FFP3), also by usability and clogging resistance.

Performance tests in this standard 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 EN 149:2001+A1:2009 can be purchased from your national standards body.

**Designations:** 

R = Reusable

NR = Non reusable (single shift use only)

D = Meets the clogging resistance requirements

# **Applications**

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

Model	EN 149+A1 Classification	Exhalation Valve	Threshold Limit Value, TLV	Gas & Vapour
9925	FFP2 NR D	Valved	10	Ozone (10x TLV) Nuisance Organic Vapours (< TLV)
9928	FFP2 R D	Valved	10	Ozone (10x TLV) Nuisance Organic Vapours (< TLV)

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	FFP2	Organic Vapour	Welding
Painting,	Solvent-Based - brush / roller applied		•	
Varnishing, Spraying,	Solvent-Based - spray applied	Ask 3M		
Coating, Mixing	Water-Based - brush / roller / spray applied		•	
Wilking	Wood Preservatives		•	
	Powder Coating			
Sanding,	Rust, most Metals, Filler, Concrete, Stone	•		
Stripping, Grinding,	Cement, Wood, Steel,	•		
Cutting,	Paints, Varnish, Anti-rust coating	•		
Drilling	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 /	Handling infected animals, Culling	•	•	
Forestry	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	Powdered Additives / Chemicals	•	•	
Applications	Pharmaceuticals	•	•	
	Rubber / Plastics processing		•	
		•		
	Oil and Gas Extraction / Processing			
	Pottery, Ceramics	•		
	Wood / Paper Mills only an outline designed to focus on products which may be appropriate for typical at			

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.

#### **Materials**

The following materials are used in the production of the 3M<sup>™</sup> Welding Fume Respirators 9925 and 9928:

Component	Material	
Straps	Cotton / Polyisoprene / Polypropylene	
Nose Clip	Aluminium	
Filter	Polyester / Polypropylene / Carbon	
Faceseal	9928 - PVC Foam	
Nosefoam	9925 - PVC Foam	
Valve	Polypropylene	
Valve diaphragm	Polyisoprene	

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

Maximum mass of products = 18g

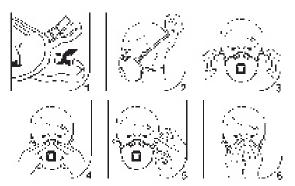
#### **Fitting Instructions**

See Figure 1.

All respirator components should be inspected for damage prior to each use.

- Thread top elastic strap through top buckles. Repeat for bottom strap and buckles.
- Hold respirator under chin, with nosepiece up. Locate the upper strap across the crown of the head and the lower straps below the ears. Straps must not be twisted.
- Adjust tension: Increase pull evenly on both ends of top/ bottom straps.
- 4. Decrease without removing respirator, push out on back of buckles.
- 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 national requirements. For information regarding fit testing procedures, please contact 3M.

## **Product Range**



# **Cleaning Instructions**

9928 only: If the respirator is to be used for more than one shift the faceseal/gasket must be cleaned at the end of each shift using the 3M<sup>TM</sup> 105 face seal wipe. DO NOT immerse product in water. Store cleaned respirator in clean, airtight container.

# **Storage and Transportation**

The  $3M^{TM}$  Welding Fume Respirators 9925 and 9928 have a shelf life of 3 years. End of shelf life is marked on the product packaging. Product should be stored in clean, dry conditions within the temperature range:  $-20^{\circ}\text{C}$  to  $+25^{\circ}\text{C}$  with a maximum relative humidity of <80%. When storing or transporting this product use original packaging provided. Do not store in direct sunlight.

### **Disposal**

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

# **△**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 a safety professional/3M representative.
- Before use, the wearer must be trained in use of the complete product in accordance with applicable Health and Safety standards/guidance.

- These products do not contain components made from natural rubber latex.
- These products do not protect against gases/vapours except against Ozone in concentrations up to 10 x TLV and relief from nuisance levels of Organic Vapours (i.e. levels below TLV). See packaging for specific use conditions.
- 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.
- For single shift use or re-usable devices: Discard and replace the respirator if it becomes damaged, breathing resistance becomes excessive, Ozone breakthrough occurs or at the end of the shift\*
- Never alter, modify or repair this device.
- In case of intended use in explosive atmospheres, contact 3M.
- Before initial use, always check that the product is within the stated shelf life (use by date).
- \* The 9928 is re-usable for particulate protection only and can be used for more than one shift. See Cleaning instructions.

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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