

3M

Speciality Respirators

9906 9913 9914 9915 9916 9926

Data Sheet



Main Features

The 3M™ Speciality Respirator Range provides lightweight, effective and comfortable protection against fine dusts and mists. It also provides additional relief from low levels of organic vapours or acid gases such as sulphur dioxide and hydrogen fluoride. The convex shape, twin strap design, foam nose seal and aluminium nose clip ensure a good face seal over a range of face shapes and sizes. The collapse resistant shell and 3M Cool Flow valve (featured on the 9914, 9916 and 9926) offer durable, comfortable protection particularly in hot and humid conditions.

As these respirators are “maintenance free” there is no need for a respirator maintenance programme.

Approvals

- The 3M Speciality Range has been shown to meet the Basic Safety Requirements under Articles 10 and 11B of European Community Directive 89/686.
- Meet the performance requirements of the European Standard for filtering facepiece dust respirators EN149.
- The respirators are CE marked.

Materials

The following materials are used in the production of these respirators:

- Straps - Polyisoprene
- Nose Clip - Aluminium
- Filter - Polypropylene
- Nose foam - Polyurethane
- Valve - Polypropylene
- Valve diaphragm - Polyisoprene

Weight : range: 13-18g

Standards

The range has been tested to EN149 and has met the requirements of the performance categories shown below.

Respirator number	Category
9906, 9913, 9914, 9915, 9916	FFP1
9926	FFP2

The main performance tests in this standard are:

• Total Inward Leakage

Ten test subjects perform a series of exercises while walking on a tread-mill. The amount of contamination leaking into the respirator through the filter, face seal and valve is measured. For category FFP1 the leakage must not exceed 22% and for FFP2 the leakage must not exceed 8% for eight of the ten results.

• Filter Penetration

The filter efficiency of twelve respirators is tested against a sodium chloride and a paraffin oil aerosol .

For the FFP1 category sodium chloride and paraffin oil penetration must not exceed 20%.

For the FFP2 category sodium chloride and paraffin oil penetration must not exceed 6%.

• Flammability

Four respirators are individually passed through a flame at 800 (±50)°C at a speed of 6 (±0.5)cm/sec. The respirators shall not continue to burn after removal from the flame.

• Breathing resistance

The resistance created by the respirator filter to an airflow of 30 l/min and 95 l/min is evaluated. For an FFP1 respirator this must not exceed 0.6mbar and 2.1mbar at the respective flows. For an FFP2 respirator this must not exceed 0.7mbar and 2.4 mbar at the respective flows.

• Information

A range of information, specified in this standard, must be provided on the packaging of the respirator. A full copy of EN149 can be purchased from your national standards body.

Correct Usage

Respirators in this range may be used in concentrations of solid or liquid aerosols up to 4* times the Occupational Exposure Limit (OEL) for FFP1 respirators and up to 10* times the OEL for an FFP2 respirator.

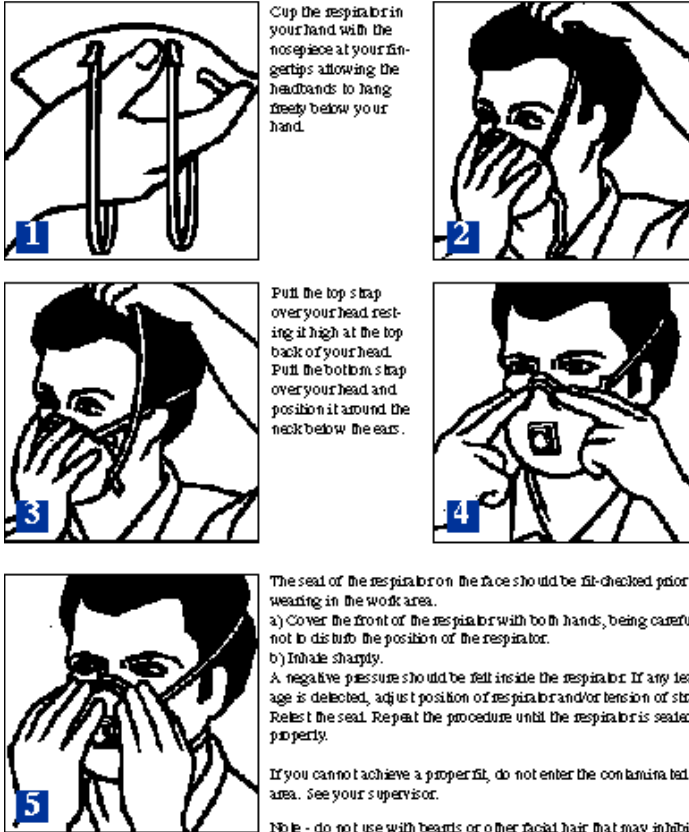
They may also be used to remove the irritation caused by acid gases or organic vapours as specified in the Applications table at levels below the OEL.

* Assigned Protection Factor (APF) as detailed in UK standard BS4275-1997

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Fitting Instructions



1 Cup the respirator in your hand with the nosepiece at your fingertips allowing the headbands to hang freely below your hand.

2 Position the respirator under your chin with the nosepiece up.

3 Pull the top strap over your head resting it high at the top back of your head. Pull the bottom strap over your head and position it around the neck below the ears.

4 Place the fingertips of both hands at the top of the metal nosepiece. Mould the nosepiece to the shape of your nose by pushing inward while moving your fingertips down both sides of the nosepiece. Pinching the nosepiece using one hand may result in less effective respirator performance.

5 The seal of the respirator on the face should be fit-checked prior to wearing in the work area.
 a) Cover the front of the respirator with both hands, being careful not to disturb the position of the respirator.
 b) Inhale sharply.
 A negative pressure should be felt inside the respirator. If any leakage is detected, adjust position of respirator and/or tension of strap. Repeat the seal. Repeat the procedure until the respirator is sealed properly.
 If you cannot achieve a proper fit, do not enter the contaminated area. See your supervisor.
 Note - do not use with beards or other facial hair that may inhibit contact between the face and the edge of the respirator.

Warnings

- As with the use of any respiratory device, the wearer must first be trained in the proper use of the product.
- This product does not protect the wearer against oil based aerosols, gases or vapours (other than the acid gases or organic vapours specified), or atmospheres containing less than 19.5% oxygen.
- Use only in adequately ventilated areas containing sufficient oxygen to support life.
- Do not use when concentrations of contaminants are immediately dangerous to life or health.
- Leave the area immediately if:
 - Breathing becomes difficult
 - Dizziness or other distress occurs
- Discard and replace the respirator at the end of one shift or if it becomes damaged or breathing resistance becomes excessive.
- Never alter or modify the device.

Applications

	Fine Particulates	Gases and Vapours	Application
3M 9906 <i>unvalved</i>	Assigned Protection Factor (APF): 4 x OEL Nominal Protection Factor (NPF): 4 x OEL	Hydrogen Fluoride: Below OEL	Aluminium refining, Stone cleaning, Acid cleaning and etching processes.
3M 9913 <i>unvalved</i>	Assigned Protection Factor (APF): 4 x OEL Nominal Protection Factor (NPF): 4 x OEL	Organic vapours: Below OEL	Inks and dyes, Cosmetic manufacture, Electronics, Furniture manufacture Food processing, Decorating, Refurbishing Hospitals, Forensic laboratories
3M 9914 <i>Cool Flow valve</i>	Assigned Protection Factor (APF): 4 x OEL Nominal Protection Factor (NPF): 4 x OEL	Organic vapours: Below OEL	As for 9913
3M 9915 <i>unvalved</i>	Assigned Protection Factor (APF): 4 x OEL Nominal Protection Factor (NPF): 4 x OEL	Acid gases including: Hydrogen Fluoride, Sulphur Dioxide, Chlorine: Below OEL	As for 9906 plus: Paper mills, Food processing, Coal power stations, Battery manufacture and Smog in Cities
3M 9916 <i>Cool Flow valve</i>	Assigned Protection Factor (APF): 4 x OEL Nominal Protection Factor (NPF): 4 x OEL	As for 9915	As for 9906 plus: Paper mills, Food processing, Coal power stations, Battery manufacture and Smog in Cities
3M 9926 <i>Cool Flow valve</i>	Assigned Protection Factor (APF): 10 x OEL Nominal Protection Factor (NPF): 12 x OEL	As for 9915	As for 9906 plus: Paper mills, Food processing, Coal power stations, Battery manufacture and Smog in Cities

Information and Advice

3M offers advice on the selection of products and training in the correct fitting and usage.

For help with selecting the most appropriate forms of PPE and relevant Health & Safety legislation, or more detailed product information, please contact the 3M Health & Safety Helpline on: 0870 60 800 60. For callers within the Republic of Ireland: 1800 320 500.

3M

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