



## 3M™ 4000 Series Half Mask Respirators

### Main Features

The 3M™ 4000 Series Respirators are a range of ready-to-use, maintenance-free half masks, designed for effective and comfortable protection against many gases, vapours and combination particulate hazards found throughout industry. Utilising unique filter technology allows a very low-profile for undisturbed view to make your worklife more comfortable.

The main features include:

- Disposable, maintenance free half mask.
- Soft, textured face seal to provide a more comfortable fit to the face.
- Lightweight and well balanced to ensure comfort during long periods of work.
- Twin inhalation valves and large, bonded carbon filters to reduce breathing resistance, complimented by a low resistance parabolic exhalation valve to reduce heat build-up.
- Low profile design allows for better peripheral vision and compatibility with 3M™ Eyewear range.
- Easy to use as no need for assembly, maintenance or record keeping.
- Easy and secure fitting of neck strap and adjustment of head cradle.
- Optional overspray guard prolongs the life of the particulate filter when paint spraying.
- Maximum product weight of 320 grams.

### Approvals

The 3M™ 4000 Series Respirators have met 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, has been issued for these products by INSPEC International Limited, 56 Leslie Hough Way, Salford, Greater Manchester M6 6AJ, UK (Notified Body number 0194). Certification under Article 11, EC quality control, has been issued by BSI Product Services (Notified Body number 0086).

### Standards

The 3M™ 4000 Series Respirators meet the performance requirements of the European Standard EN 405:2001+A1:2009 for valved filtering half-mask respirators for gases, vapours and particulate combinations.

### Product Options

The 4000 Series Respirators come in a variety of different product options:

- 3M™ 4251 (FFA1P2 R D) provides protection against organic vapours (good warning properties and b.pt. > 65°C), up to 10 x Threshold Limit Value (TLV) or 1000 parts per million (ppm), whichever is lower, and 12 x TLV for particulates.
- 3M™ 4255 (FFA2P3 R D) provides protection against organic vapours (good warning properties and b.pt. > 65°C), up to 10 x TLV or 5000 ppm, whichever is lower and 50 x TLV for particulates.
- 3M™ 4277 (FFABE1P3 R D) provides protection against organic vapours (good warning properties and b.pt. > 65°C), inorganic and acid gases up to 10 x TLV or 1000 ppm, whichever is lower and 50 x TLV for particulates.
- 3M™ 4279 (FFABEK1P3 R D) provides protection against organic vapours (good warning properties and b.pt. > 65°C), inorganic and acid gases and ammonia, up to 10 x TLV or 1000 ppm, whichever is lower and 50 x TLV for particulates.



## Applications

FILTER PRODUCT (CLASS)	HAZARD	INDUSTRY
4251 (FFA1P2 R D) 4255 (FFA2P3 R D)	Organic Vapours and Particulates	<ul style="list-style-type: none"> <li>- Anywhere conventional paints are used.</li> <li><b>(non-Isocyanates, subject to usage conditions)</b></li> <li>- Vehicle manufacture</li> <li>- Plant equipment manufacture</li> <li>- Shoe treatment and tanneries</li> <li>- Domestic appliance manufacture</li> <li>- Aircraft manufacture and refurbishment</li> <li>- Boat building</li> <li>- Machinery manufacture</li> <li>- Chemical manufacture and handling</li> <li>- Ink and dye manufacture and usage</li> <li>- Adhesive manufacture and laboratories</li> <li>- Paint and varnish manufacture</li> <li>- Manufacture and use of resins</li> </ul>
4277 (FFABE1P3 R D)	Organic Vapours, Inorganic Gases, Acid Gases and Particulates	As 4251 but also: <ul style="list-style-type: none"> <li>- Electrolytic processes</li> <li>- Acid cleaning</li> <li>- Metal pickling</li> <li>- Metal etching</li> </ul>
4279 (FFABEK1P3 R D)	Organic Vapours, Inorganic and Acid Gases, plus Ammonia and Particulates	As 4277 but also: <ul style="list-style-type: none"> <li>- Manufacture and maintenance of refrigeration equipment</li> <li>- Agrochemicals</li> </ul>

## Use Limitations

This respirator does not supply oxygen. Do not use in atmospheres containing less than 19.5%\* oxygen.

1. Do not use for respiratory protection against atmospheric contaminants that have poor warning properties or are unknown or immediately dangerous to life and health (IDLH) or against contaminants which generate high heats of reaction with chemical filters.
2. Do not misuse, alter, modify or repair this product.
3. Do not use with beards or other facial hair that prevent direct contact between face and edge of the respirator.
4. Do not use with unknown concentrations of contaminants.
5. Do not use for escape purposes.
6. Leave the work area immediately and check the integrity of the respirator and replace face mask if:
  - i. Damage has occurred or is apparent.
  - ii. Breathing becomes difficult or increased breathing resistance occurs.
  - iii. Dizziness or other distress occurs.
  - iv. You taste or smell the contaminant or an irritation occurs.
7. Store this device in a sealed container away from contaminated areas when not in use.
8. Use strictly in accordance with respirator and filter user instruction leaflet.
9. In case of intended use in explosive atmospheres, contact 3M technical service.

\* 3M definition minimum 19.5% by volume oxygen.

## Materials

Component	MATERIAL
Face Mask	Thermoplastic elastomer
Head Harness	Polypropylene
Head Strap	Polypropylene/cotton
Inhalation Valve	Polyisoprene
Exhalation Valve	Silicone Rubber
Gas and Vapour Filter Body	Activated Carbon
Particulate Filter Element	Polypropylene

## Fitting Instructions

Before assigning any respirator to be worn in a contaminated area, we recommend that a qualitative or quantitative fit check be performed before entering the workplace.

Fitting instructions must be followed each time the respirator is worn.

1. Assemble/adjust head cradle by feeding the perforated strip through the buckle and pressing down on the stud at the required length. Repeat for second strip.
2. Place the respirator over the face, fitting it comfortably on bridge of the nose, then pull the head harness over the crown of the head.
3. If necessary remove the respirator and readjust the head cradle to a comfortable fit and repeat step 2.



4. Take a bottom strap in each hand, place them at the back of the neck and hook the straps together
5. Tighten the top head harness first by pulling on the ends to achieve a comfortable and secure fit. Tighten bottom straps in a similar manner. Strap tension may be decreased by pushing out on back side of buckles.



6. (Where applicable) After tightening the head harness (see 5), slide the 4 plastic rings over the 4 buckles, to lock the head straps in place

## Fit Check

Perform a positive pressure fit check each time the respirator is donned.

Positive pressure Face Fit check

Fitting instructions must be followed each time the respirator is worn.



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, re-position 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

## Cleaning and Storage

If the respirator is to be used for more than one shift it should be cleaned at the end of each shift and stored between shifts in the original packaging. To clean the respirator, the faceseal should be wiped with a cloth moistened in warm soapy water (the water temperature should be below 40°C) and dried at room temperature. The product **MUST NOT** be immersed in water during cleaning. Alternatively, faceseal may be cleaned using the 3M™ 105 Face Seal Cleaner. Always check that the product has not exceeded the use by date before use.

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 Health & Safety Helpline.

### 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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