



1800 Series Health Care Respirator

Data Sheet



Description

The 3M Health Care Respirators are disposable and provide a tight fit to the face. They offer high filtration of sub-micron particles. These respirators meet the requirements of EN149:2001. They can be used to protect the wearer against solid and non-volatile liquid particles.

Intended use

These Health Care Respirators are intended for use by health care professionals requiring a higher filtration efficiency of particles, down to sub-micron size, compared to that offered by standard tie-on surgical masks. They reduce the potential exposure of the wearer to airborne microorganisms, blood and body fluids. When properly worn, the 1861, 1862 and 1863 respirators also help to reduce patient contamination caused by exhaled organisms. They have achieved greater than 99% Bacterial Filter Efficiency*.

Main Features

The advanced 3 panel design of the 3M 1800 series means they are easier to breathe through and not prone to collapse. Being foldable they offer you more convenience than traditional cup shaped respirators. Its features include a headband material which keeps a near constant tension, reducing strap pressure and ensuring a secure fit to the face for a range of head sizes. The patented exhalation valve minimises heat build-up and makes breathing easier and cooler. Improved comfort is also achieved by using a soft material for sections of the respirator in contact with the skin. The respirators are individually packed to avoid contamination during storage and the straps are colour coded, making identification easier.

Materials

The following materials are used in the production of this product:

- Straps - Polyisoprene
- Nose Clip - Aluminium
- Filter - Polypropylene
- Nose Foam - Polyurethane
- Valve - Polypropylene / Polyisoprene

The 3M 1800 series respirators do not contain any components made from natural rubber latex.

Weight : Unvalved - 10g - Valved - 15g

Approvals

The 3M 1800 series has been shown to meet the Basic Safety Requirements under Annex II of the European Community Directive 89/686. An EC type examination certificate is in force issued by the British Standards Institute. The product is CE marked.

In addition to meeting the requirements of the EC Directive 89/686EEC, the 1861, 1862 and 1863 are also in compliance with Annex VII of the Medical Devices Directive 93/42/EEC as Class 1 devices and therefore can be used as surgical masks.

Standards

These products have been tested to the European Norm EN149:2001 and have met the requirements of this standard. The main performance tests in this standard are:

- Filter Penetration
- Flammability
- Breathing Resistance
- Performance

The products provide protection against solids, water based and non-volatile liquid aerosols and offer the protection factors given below.

Product	1861	1862/1872V	1863/1873V
Category	FFP1	FFP2	FFP3
Nominal Protection Factor (NPF)	4	12	50
Assigned Protection Factor (APF)**	4	10	20

The 1861, 1862 and 1863 also meet the BSI PAS Standard 029 fluid resistance test.

Maximum use limitations:

The respirator may be used in concentrations of solid, water based and non-volatile liquid based aerosols where the limits below are not exceeded.

1861 4 times the Workplace Exposure Limit (WEL)

1862, 1872V 10 times the Workplace Exposure Limit

1863, 1873V 20 times the Workplace Exposure Limit

The Workplace Exposure Limits (WELs) are listed in EH40 Workplace Exposure Limits published by the Health and Safety Executive (HSE).

Fitting instructions

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



1

The noseclip is located in the top panel. Pre-form it by gently bending the centre of the panel with thumb and index finger. Hold the respirator in one hand and pull out the bottom panel to form a cup.

Turn the respirator over to expose the headbands, letting them hang free.

2



3

The respirator should be fitted under your hat directly onto your head not on top as with a surgical mask. Cup the respirator under your chin and pull the headbands over your head. Locate the lower band below your ears and the upper band across the crown of your head.

Adjust the top and bottom panels for a comfortable, snug fit. Ensure the respirator is flat against your cheeks at the area of the staples.

4



5

Using both hands, mould the noseclip to the shape of the lower part of the nose. Pinching the nosepiece with only one hand can result in less effective respirator performance.

The seal of the respirator on the face should be fit-checked prior to wearing in work area. Cover the front of the respirator with both hands being careful not to disturb the position of the respirator. For an unvalved product - exhale sharply. For a valved product - inhale sharply. If air flows around the nose, readjust nosepiece area; if air flows around respirator edges, readjust the headbands. Repeat the check to affirm good fit before entering the work area.

6



7

There are two removal methods which seem to be the most commonly used in healthcare settings:

1. Pinch both the top and the bottom bands together with your fingers at either side of the face. Pull the respirator away from the face and then lift it over the head and dispose.
2. Snap the bottom band followed by the top band of the respirator, at one side of the face. Lift the respirator off the face and dispose. DO NOT RE-USE. Wash hands after disposal.

Note

do not use with beards or other facial hair that may prevent contact between the face and 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 gases, vapours, solvents from paint spray operations 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 (IDLH).
- Leave the area immediately if breathing becomes difficult or dizziness or other distress occurs
- Discard and replace respirator if it becomes damaged, breathing resistance becomes excessive, at the end of one shift or as specified in your health and safety procedures.
- Never alter or modify this device.

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

Fit testing

The UK Control of Substances Hazardous to Health Regulations (COSHH) require wearers of this type of respirator to be fit tested. The two main methods used in the workplace are a qualitative taste test and a quantitative particle counting test. 3M manufacture two qualitative fit testing kits: FT-10 (sweet) and FT-30 (bitter). Please contact 3M for further information.

*Bacterial Filter Efficiency (BFE) determined by the modified Greene & Vesley test method.

**Assigned Protection Factor (APF) as detailed in HSE publication HSG53.

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

For further information please contact Customer Service:

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