

Respiratory Protective Equipment

INTRODUCTION

In today's world there are multiple concerns surrounding our lungs and general respiratory health, and in a work environment it is necessary for many people to wear respirators or breathing apparatus to protect their health. In simple terms, respirators work to prevent harmful substances from in the air being inhaled. Most types of respirator work by filtering the air whilst some types provide a supply of clean air to breathe.

This simple guide has been developed to provide an overview of the key points you need to consider when selecting Respiratory Protective Equipment (RPE) and explain the differences between respirator types. It will help you to shop the RS range so you can quickly and effectively find the products and parts you need to keep your staff safe in the workplace.



WHY BUY FROM RS?

As industry experts we offer a wide range of respiratory protective equipment for most requirements and environments, from professionally-approved RS products, to those from the global market leader 3M, so you can find all the products you need from one source, with next-day delivery, competitive-pricing and bulk discounts.

WHEN IS RPE REQUIRED?

Some work activities can cause harmful substances to contaminate the air in a variety of forms, for example:

- **Dust** – airborne solid particles are present
- **Mists** – minute droplets are present (due to condensation or processes such as paint spraying)
- **Metal fumes** – airborne particles of metals that have vaporised and condensed (e.g. through welding processes)
- **Gases** – can be odourless and/or invisible and spread quickly
- **Vapours** – from the evaporation of solids or liquids at room temperature
- **Oxygen deficient atmospheres** – oxygen has been displaced or diluted, resulting in a risk of asphyxiation

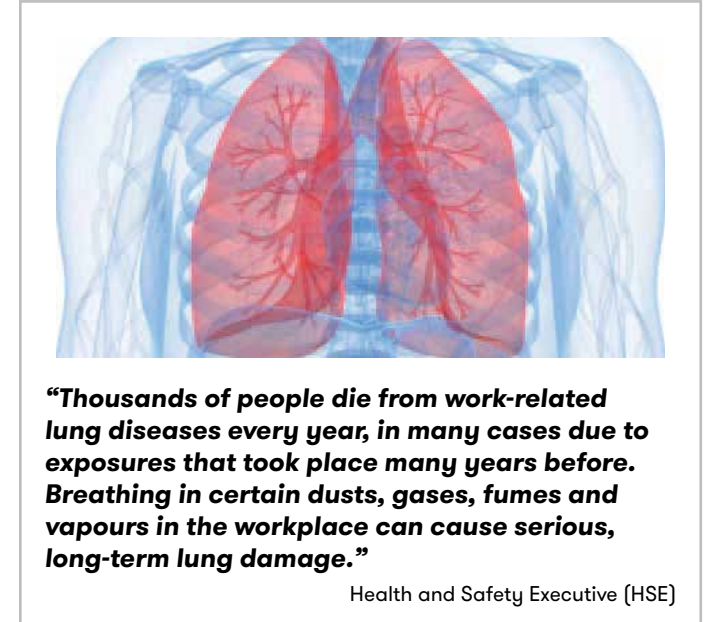
WHY IS RPE REQUIRED?

National health and safety regulations commonly set out the requirements for minimising hazardous risks in the workplace.

RPE should ONLY be used where ALL attempts have been made to remove or reduce the levels of hazard, for example by installing extraction equipment, or by putting up physical barriers before even considering the use of RPE.

National health and safety regulations generally require that employers should:

1. Identify the hazard
2. Assess the concentration of the hazard
3. Provide only CE approved PPE/RPE
4. Establish a documented training program for all employees that are required to use RPE to ensure correct use, fitting and maintenance – which should include cleaning, replacement and storage



“Thousands of people die from work-related lung diseases every year, in many cases due to exposures that took place many years before. Breathing in certain dusts, gases, fumes and vapours in the workplace can cause serious, long-term lung damage.”

Health and Safety Executive (HSE)

IMPORTANT NOTE

Respirators MUST NEVER be used in oxygen deficient atmospheres. Specialist breathing apparatus is required that is not covered in this guide.



STEP-BY-STEP GUIDE TO PROVIDING PROTECTION

Selecting adequate and suitable RPE can appear daunting at first. With so many factors to consider, plus such a variety of options, it can be difficult to know where to start.

1 IDENTIFY THE HAZARDS

- a At a high level, there are three types of respiratory hazard:
 - Particulate Hazards:** e.g. mists, fumes, dusts or fibres
 - Gas and Vapour Hazards:** e.g. solvent vapours or acidic gases
 - Oxygen Deficient Atmospheres:** e.g. often found in confined spaces and/or where oxygen is consumed by materials or combustion
- b You need to understand the types of hazards that your workers encounter before you can make a decision on suitable RPE for the work environment.

Consider the type of work that is undertaken and identify:

- a. **Process Generated Hazards** e.g. dust from sanding wood or gases released in a reaction. Some work activities, such as heating or cutting materials, could generate harmful substances which contaminate the air in the form of mists, dusts, fumes or gases.
- b. **Bought-in Hazards** e.g. bottled gases, solvents or chemicals. Any product that is classed as 'Dangerous for Supply' will come with a Material Safety Data Sheet (MSDS) or Safety Data Sheet (SDS) which should provide information on:
 - health hazards (on product labelling)
 - forms of the substances contained in the product
 - the type of RPE required for its use

2 ASSESS THE RISK

To ensure the RPE you select is adequate to protect your workers against any harmful substances in the air around them, you need to understand the amount in the air and the form it takes (e.g. vapour or particles), to effectively assess the concentration of the hazard.

There are various types of respirator and breathing apparatus available and the protection they offer depends on a number of things, including the protection factor. To help you, each type and class of RPE is categorised by a protection factor which takes the form of either a Nominal Protection Factor (NPF) or an Assigned Protection Factor (APF). More information on this can be found on page 46.

Things to check:

- a. Check MSDSs of bought-in hazards – do they provide guidance on the required APF?
- b. Does the substance have a prescribed Occupational Exposure Limit (OEL)? If there is no advice on the required APF in the MSDS, you can calculate the required protection level using the OEL and quantity of substance in the air.
- c. If there is more than one hazard present, e.g. dust and gas, you will need to find out the protection factor for each and choose appropriate RPE based on the highest protection factor required.

For more information about NPF, APF and OEL see page 46.



...continued

STEP-BY-STEP GUIDE TO PROVIDING PROTECTION

3 PROVIDE CE APPROVED RPE/PPE

Now you have identified the hazards and assessed the risks you understand what protection factor you need. Next you need to consider what type of device is right for your organisation, its environment and the individuals who work there.

Here is an overview of the main respirator types, detailing the features and benefits of each type:

**Disposable Respirators**

In general, disposable respirators only protect the wearer from particulate hazards.

Features of disposable respiratory products:

- Different moulded shapes to suit individuals
- Valved or unvalved options – valved respirators reduce exhalation effort so they are cooler to wear and reduce misting of eyewear
- Most disposable respirators feature adjustable nose clips for added comfort

Benefits of using disposable respirators:

- Easy to use – no maintenance is required
- Hygienic – discard after use
- Cost-effective and versatile

**Reusable Respirators**

Available in full and half-mask options, reusable respirators protect the wearer from particulate and/or gas and vapour hazards depending on the filter type selected.

Features of reusable respiratory products:

- Wide variety of sizes, styles and filter types available to suit individual requirements
- Full and half-mask options – full face respirators also protect the eyes
- Hypoallergenic options also available

Benefits of using reusable respirators:

- Versatile; filters can be changed to protect from multiple hazards
- Can be recorded and used as part of the health and safety regulations relating to reusable RPE monthly inspection and maintenance records

**Powered Respirators**

One of the main benefits of using powered (or supplied air) over disposable or reusable respirators is that they don't require fit testing to be carried out. They use a battery powered fan and motor to draw contaminated air through a filter. The filter captures certain contaminants and clean air is fed to the wearer.

- Suitable for use over long shifts – no increase in breathing resistance
- Can offer integrated head, eye and face protection
- Allows the wearer to walk freely around without any trailing tubes

✗ Cannot be used to protect against substances with poor warning properties (taste/ smell)

✗ Must not be used in conditions that are oxygen deficient or immediately dangerous to life or health (IDLH)

**Air-fed Respirators**

Like powered respirators, airfed respirators don't require fit testing as the products are classed as loose fitting. They use breathable quality air supplied from a compressor via a tube. The compressed air is regulated to a gentle flow and fed to the wearer.

- Can be used to protect against substances with poor warning properties (taste/ smell)
- Can offer integrated head, eye and face protection
- Suitable for use over long shifts – no increase in breathing resistance

✗ Must not be used in conditions that are oxygen deficient or immediately dangerous to life or health (IDLH)

4 TRAIN IN FITTING AND USE

If RPE is not worn correctly it will not provide the required protection, so it is vital that you integrate RPE use into normal workplace activities and provide adequate training. It is often best, if possible, to give a choice of several adequate and suitable RPE to wearers so they can select the most comfortable.

All people involved in the selection, use, storage and maintenance (if necessary) of RPE require training. Ideally this needs should cover:

- Why RPE is necessary
- Hazards and their risks and effects
- The type of RPE being provided
- How it works
- Why fit testing is required (if relevant)
- How to wear and check equipment correctly
- Fit checking before use
- Details of maintenance required/when
- How to clean and store
- What to do if there's a problem with any RPE
- Responsibilities of both employer and employees
- RPE use and misuse

Fit testing

Face piece fit testing is a way of checking that a tight-fitting face piece (typically disposable and reusable respirators, although this can include half and full face masks, including those that form part of an air-fed or powered respirator) fits the wearer's facial features and forms an adequate seal. Fit testing of all tight fitting respirators is mandatory in the UK. In certain other countries, fit testing of tight fitting respirators is mandatory in certain industries. Further information about Fit Testing can be found at www.fit2fit.org – the UK Fit2Fit accreditation scheme for testers.

NOMINAL AND ASSIGNED PROTECTION FACTORS

What are NPFs and APFs?

Nominal Protection Factors (NPFs) and Assigned Protection Factors (APFs) are simply a numerical rating indicating how much protection a device can offer. NPFs are derived exclusively from laboratory measurements, whilst APFs are derived from workplace measurements and represent the minimum protection factor that a trained wearer will achieve wearing the respirator in the workplace.

Unfortunately, there is not a standard approach to using NPFs and APFs across Europe. Some countries stipulate that NPFs should be used, whilst others like the UK, France and Germany stipulate that APFs should be used. Furthermore, some countries have different APF values for the same

class and type of respiratory protective device.

Therefore, it is always important to check and be familiar with national regulations and requirements when selecting and using respiratory protective devices.

Example: So wearing RPE with an APF of 10 will reduce exposure to the wearer by at least a factor of 10 (as long as RPE is used correctly). In the simplest terms, the RPE wearer will breathe in one-tenth or less of the amount of substance present in the air.

Nominal Protection Factors and Assigned Protection Factors used in different countries		NPF	3M Stated max. PF	APF UK	APF France	APF Germany	APF Italy
EN149 (Filtering Facepiece)	FFP1	4	4	4	4	4	4
	FFP2	12	12	10	10	10	10
	FFP3	50	50	20	10	30	30
EN12941 (Powered air Turbo with loose fitting headtop)	TH1	10	10	10	5	5	5
	TH2	50	50	20	20	20	20
	TH3	500	500	40	40	100	200

OCCUPATIONAL EXPOSURE LIMITS

What are OELs?

An Occupational Exposure Limit (OEL) is a predetermined upper limit on the acceptable concentration of a hazardous substance in workplace air.

OELs are normally determined by workplace sampling and reviews of historical exposures and workplace health statistics. OELs are typically determined by competent national authorities

and enforced by legislation to protect workplace health and safety. Like APFs described above, OELs for any given chemical, material or class of material can vary from country to country across Europe, so it is important to also check and be familiar with national OELs when implementing a respiratory protection programme.



FILTER TYPES

Main Respiratory Hazards Level 1	Sub-hazards Level 2	Sub-hazards Level 3	Examples	Typical Risks
Particulates (a suspension of particulates in air is called an aerosol)	Dusts	Dust	(Respirable Crystalline Silica from cutting concrete block)	Acute through to Chronic health effects, Explosion / Fire
		Metal fumes	Welding fume	Acute through to Chronic health effects
		Fibres	Asbestos	Acute through to Chronic health effects
		Bioaerosols	Moulds, bacteria, viruses	Acute health effects (sensitisation), Infection
	Mists	Mists	Fine mists from spray painting	Acute through to Chronic health effects, Explosion / Fire
Gases & Vapours	Gases		Sulphur Dioxide, Ammonia, Carbon Monoxide	Acute through to Chronic health effects, IDLH exposures - toxic / asphyxiation, Explosion / Fire
	Vapours		Mercury, Formaldehyde	
Oxygen Deficiency	Oxygen Deficient Atmospheres		<19.5% Oxygen	IDLH - asphyxiation



FULL MASK

Brand	Image	Description	Manufacturer Part No.	Hypoallergenic	Size	RS Stock No.
	1	Full Face Mask	-	Yes	One Size	918-5781
	2	Crusader Negative Pressure Respirator	310-00-80P	No	One Size	230-4001
	3	6000 Series Respirator	6700	No	S	286-7136
	3	6000 Series Respirator	6800	No	M	286-7142
	3	6000 Series Respirator	6900	No	L	286-7164
	4	Full Face Respirator	7907S	No	One Size	286-7120

HALF MASK

Brand	Image	Description	Manufacturer Part No.	Hypoallergenic	Size	RS Stock No.
	5	Half Mask	-	Yes	One Size	918-5790
	6	Organic Vapour/Particulate Respirator	4251	No	One Size	711-766
	6	Organic Vapour/Particulate Respirator	4255	No	One Size	766-176
	7	ABE1P2SL Maintenance Free Respirator	4277	No	One Size	358-4359
	7	ABEK1P2SL Maintenance Free Respirator	4279	No	One Size	287-2649
	8	6000 Series Respirator	6100	No	S	766-362
	8	6000 Series Respirator	6200	No	M	766-378
	8	6000 Series Respirator	6300	No	L	766-384
	9	6500 Series Respirator	70071668134	No	S	815-4164
	9	6500 Series Respirator	70071668142	No	M	815-4168
	9	6500 Series Respirator	70071668159	No	L	815-4177



HALF MASK

Brand	Image	Description	Manufacturer Part No.	Hypoallergenic	Size	RS Stock No.
3M	1	7500 Series Respirator	7501	No	S	773-4448
	1	7500 Series Respirator	7502	No	M	472-3735
	1	7500 Series Respirator	7503	No	L	472-4457
	2	A2P3 Ready To Use Kit	7523M	Yes	M	666-7696
DELTA PLUS	3	Half Mask Respirator	M6400EGT	No	One Size	138-0714
	4	Twin Filtered Rubber Respirator	BHK000-004-051	No	One Size	288-1205
	5	Force 8 Respirator	BHT003-0L5-000	Yes	M	879-2937
JSP	5	PressToCheck P3 Kit Force 8	BHT0A3-0L5-N00	Yes	M	879-2956
	5	PressToCheck A2P3 Kit Force 8	BHT0B3-0L5-N00	Yes	M	879-2965
	5	PressToCheck ABEK1P3 Kit Force 8	BHT0C3-0L5-N00	Yes	M	879-2968
	6	AIP2 Tradesman 2 Twin Respirator	BKG280-005-051	Yes	One Size	350-1635
MOLDEX	7	700 Series Respirator	7432	No	M	894-8975



FILTERS

Brand	Image	Manufacturer Part No.	Type	Filter Type	For Use With	RS Stock No.
RS PRO	1	-	Combination Filter	Gas, Vapour, Mist, Dust	918-5797, 918-5781	918-5800
	2	-	Filter	Gas	918-5797, 918-5781	918-5797
	2	-	Filter	Dust	918-5797, 918-5781	918-5807
3M	3	6091	Combination Filter	Gas, Vapour	472-3735, 472-4457, 516-7215, 286-7120, 766-362, 766-378, 766-384 286-7142, 286-7164, 286-7136, 610-8605, 815-4168, 815-4177, 815-4164, 666-7696	137-0053
	3	6092	Combination Filter	Gas, Vapour	472-3735, 472-4457, 516-7215, 286-7120, 766-362, 766-378, 766-384 286-7142, 286-7164, 286-7136, 610-8605, 815-4168, 815-4177, 815-4164, 666-7696	137-0054
	3	6095	Combination Filter	Gas, Vapour	472-3735, 472-4457, 516-7215, 286-7120, 766-362, 766-378, 766-384 286-7142, 286-7164, 286-7136, 610-8605, 815-4168, 815-4177, 815-4164, 666-7696	137-0055
	3	6096	Combination Filter	Gas, Vapour, Mist, Dust	472-3735, 472-4457, 516-7215, 286-7120, 766-362, 766-378, 766-384 286-7142, 286-7164, 286-7136, 610-8605, 815-4168, 815-4177, 815-4164, 666-7696	137-0056
	3	6099	Combination Filter	Gas, Vapour, Mist, Dust	472-3735, 472-4457, 516-7215, 286-7120, 766-362, 766-378, 766-384 286-7142, 286-7164, 286-7136, 610-8605, 815-4168, 815-4177, 815-4164, 666-7696	294-814
	3	6099	Combination Filter	Gas, Vapour, Mist, Dust	2867-142, 286-7164, 286-7136, 610-8605, 286-7120	146-7301
	4	2125	Filter	Dust, Mist	472-3735, 472-4457, 516-7215, 286-7120, 766-362, 766-378, 766-384 286-7142, 286-7164, 286-7136, 610-8605, 815-4168, 815-4177, 815-4164, 666-7696	766-233
	5	2128	Filter	Gas, Vapour, Mist, Dust	472-3735, 472-4457, 516-7215, 286-7120, 766-362, 766-378, 766-384 286-7142, 286-7164, 286-7136, 610-8605, 815-4168, 815-4177, 815-4164, 666-7696	766-249
	6	2135	Filter	Dust, Mist	472-3735, 472-4457, 516-7215, 286-7120, 766-362, 766-378, 766-384 286-7142, 286-7164, 286-7136, 610-8605, 815-4168, 815-4177, 815-4164, 666-7696	548-8843
	5	2138	Filter	Gas, Vapour, Dust, Mist	472-3735, 472-4457, 516-7215, 286-7120, 766-362, 766-378, 766-384 286-7142, 286-7164, 286-7136, 610-8605, 815-4168, 815-4177, 815-4164, 666-7696	358-4365
	7	5935	Filter	Mist Particulates	286-7120, 766-362, 766-378, 766-384 286-7142, 286-7164, 286-7136, 610-8605, 815-4168, 815-4177, 815-4164	286-7186
8	453-09-20P03	Filter	Gas, Vapour	286-7142, 286-7164, 286-7136, 610-8605	230-0201	
9	5911 P1	Filter	Mist, Dust	236-8207, 766-198, 766-205, 766-211, 766-227, 287-2677	236-8190	
10	5925 P2	Filter	Dust, Gas	236-8207, 766-198, 766-205, 766-211, 766-227, 287-2677	409-6358	
11	501	Filter Retainer	-	286-7186, 766-198, 766-205, 766-211, 766-227, 287-2677, 137-0056, 294-814, 236-8190, 409-6358	236-8207	



FILTERS

Brand	Image	Manufacturer Part No.	Type	Filter Type	For Use With	RS Stock No.
3M		6051	Gas and Vapour Filter	Gas, Vapour	472-3735, 472-4457, 516-7215, 286-7120, 766-362, 766-378, 766-384 286-7142, 286-7164, 286-7136, 610-8605, 815-4168, 815-4177, 815-4164, 666-7696	766-198
		6054	Gas and Vapour Filter	Gas	472-3735, 472-4457, 516-7215, 286-7120, 766-362, 766-378, 766-384 286-7142, 286-7164, 286-7136, 610-8605, 815-4168, 815-4177, 815-4164, 666-7696	766-205
		6055	Gas and Vapour Filter	Gas, Vapour	472-3735, 472-4457, 516-7215, 286-7120, 766-362, 766-378, 766-384 286-7142, 286-7164, 286-7136, 610-8605, 815-4168, 815-4177, 815-4164, 666-7696	766-211
		6057	Gas and Vapour Filter	Gas, Vapour	472-3735, 472-4457, 516-7215, 286-7120, 766-362, 766-378, 766-384 286-7142, 286-7164, 286-7136, 610-8605, 815-4168, 815-4177, 815-4164, 666-7696	766-227
		6059	Gas and Vapour Filter	Gas, Vapour	472-3735, 472-4457, 516-7215, 286-7120, 766-362, 766-378, 766-384 286-7142, 286-7164, 286-7136, 610-8605, 815-4168, 815-4177, 815-4164, 666-7696	287-2677
DELTA PLUS		M6000EA2R	Filter	Gas, Vapour	138-0714	138-0711
		M6000EABEK1	Filter	Gas, Vapour	138-0714	138-0710
		M6000EPREP3R	Filter	Dust, Mist	138-0714	138-0713
		M6000P2R	Filter	Dust, Mist	138-0714	138-0712
		M9000EA2	Filter	Gas, Vapour	138-0718	138-0715
		M9000EABEK2P3	Filter	Gas, Vapour, Dust	138-0718	138-0716
		BME20000651	Filter	Gas, Vapour, Dust	288-1205	228-7940
JSP		BME21000651	Filter	Gas, Vapour, Dust	288-1205	228-7962
		BME33000651	Filter	Gas, Vapour, Dust	288-1205	228-7928
		BME39000651	Filter	Gas, Vapour, Dust	288-1205	228-7956
		BMN740-000-651	Filter	Gas, Vapour, Dust	879-2968, 879-2965, 879-2956, 879-2937	879-2934
		BMN750-000-600	Filter	Gas, Vapour, Dust	879-2968, 879-2965, 879-2956, 879-2937	879-2943
		BMN990-001-700	Filter	Dust	879-2968, 879-2965, 879-2956, 879-2937	879-2930
		BME20000651	Filter	Gas, Vapour, Dust	288-1205	228-7940



FILTERS

Brand	Image	Manufacturer Part No.	Type	Filter Type	For Use With	RS Stock No.
		BMS41000051	Filter	Dust	288-1205	228-7984
		BME220000651	Filter	Gas, Vapour	288-1205	228-7899
		BME380000651	Filter	Dust, Mist	288-1205	228-7883
		9030	Filter	Dust, Mist	894-8975	894-8979
		9400	Filter	Gas, Vapour	894-8975	907-6245

ADDITIONAL ACCESSORIES

Brand	Image	Manufacturer Part No.	Type	For Use With	RS Stock No.
		105	Cleaning Wipe	711-766, 766-176, 287-2649, 472-3735, 472-4457, 516-7215, 286-7120, 766-362, 766-378, 766-384, 286-7142, 286-7164, 286-7136, 610-8605, 815-4168, 815-4177, 815-4164, 666-7696	516-7338
		6885	Visor Cover	286-7142, 286-7164, 286-7136, 610-8605	323-4795



3M Science.
Applied to Life.™

Fit to protect

3M™ Particulate Respirators
8825+ and 8835+

3M has a long history of innovation – over 40 years in respiratory protection alone, and a passion for applying science to the development of safe, comfortable respirators. Now 3M has innovated further, applying the science of fit to build upon existing product benefits and taking the new 3M™ Disposable Respirators 8825+ and 8835+ to new heights.

8825+ (RS No. 125-4033) / 8835+ (RS No. 125-4034)



Product Instruction Language	A	UK, Denmark, Sweden, Norway, Finland, Slovenia, Croatia, Estonia, Latvia, Lithuania, Slovakia, Russian Federation, Serbia, Kazakhstan, Bulgaria, Ukraine, United Arab Emirates
	B	France, Italy, Germany, Turkey, Spain, Portugal, Netherlands, Czech Republic, Romania, Poland, Hungary, Greece, Israel, Australia

PROTECTION CLASS FFP1

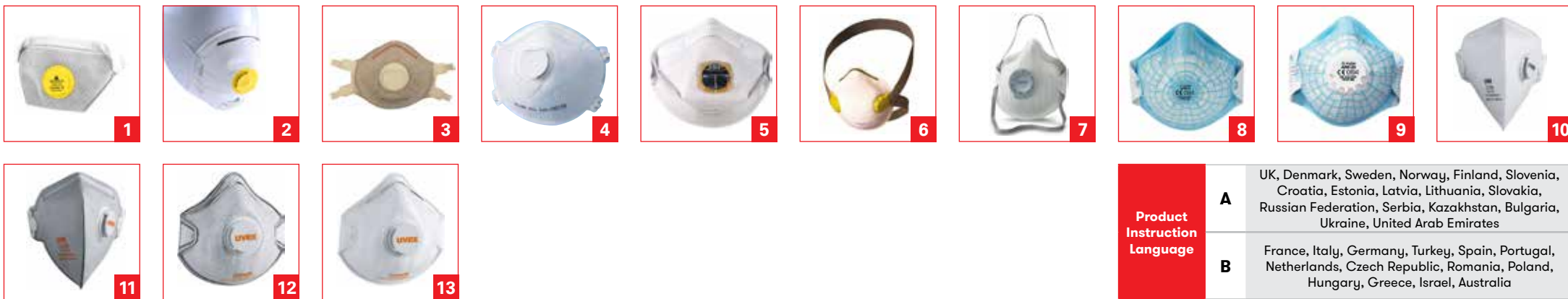
Brand	Image	Description	Manufacturer Part No.	Valved	Moulded	Adjustable Nose Clips	Style	Product Instruction Language	RS Stock No.
	1	Cup Shaped Respirator	-	No	No	Yes	Cup	-	918-5804
	2	Cup Shaped Respirator	-	Yes	Yes	No	Cup	-	161-1586
	3	Fold Flat Respirator	-	Yes	No	Yes	Fold Flat	-	918-5822
	4	Valved Dust/Mist Respirator	8312	Yes	Yes	Yes	Cup	-	705-8797
	5	Dust Respirator	8710E	Yes	Yes	Yes	Cup	-	711-687
	6	Valved Dust Respirator	8812	Yes	Yes	Yes	Cup	-	766-356
	7	Aura Dust Respirator	9310+	No	No	No	Fold Flat	A	766-0369
	7	Aura Dust Respirator	9310+	No	No	No	Fold Flat	B	742-7487
	8	Aura Valved Dust Respirator	9312+	Yes	No	No	Fold Flat	A	766-0378
	8	Aura Valved Dust Respirator	9312+	Yes	No	No	Fold Flat	B	742-7496
	9	Nuisance Odour Respirator	9913	No	Yes	Yes	Cup	-	711-744
	10	Valved Nuisance Odour Respirator 10pk	9914	Yes	Yes	Yes	Cup	-	450-1715
	12	Acid Vapour Respirator	1005598	Yes	Yes	Yes	Cup	-	409-3141
	13	Typhoon Valve Fold Flat Respirator	BEY110-201-000	Yes	No	Yes	Fold Flat	-	736-2302
	14	R10 Dual Valved Respirator	64260	Yes	Yes	Yes	Cup	-	767-2964
	15	3010-V Moulded Mask	3010-V	Yes	Yes	No	Cup	-	125-4010
	16	AMF1 AlphaFlow Moulded Respirator	AMF1	No	Yes	No	Cup	-	125-4005



Product Instruction Language	A	UK, Denmark, Sweden, Norway, Finland, Slovenia, Croatia, Estonia, Latvia, Lithuania, Slovakia, Russian Federation, Serbia, Kazakhstan, Bulgaria, Ukraine, United Arab Emirates
	B	France, Italy, Germany, Turkey, Spain, Portugal, Netherlands, Czech Republic, Romania, Poland, Hungary, Greece, Israel, Australia

PROTECTION CLASS FFP2

Brand	Image	Description	Manufacturer Part No.	Valved	Moulded	Adjustable Nose Clips	Style	Product Instruction Language	RS Stock No.
	1	Valved Dolomite Respirator	-	Yes	Yes	Yes	Cup	-	918-5810
	2	Cup Shaped Respirator	-	No	No	Yes	Cup	-	918-5813
	3	Fold Flat Respirator	-	Yes	No	Yes	Fold Flat	-	918-5826
	4	Valved Dust/Mist Respirator	8322	Yes	Yes	Yes	Cup	-	705-8790
	5	Dust/Mist Respirator	8810	No	Yes	Yes	Cup	-	179-3618
	6	Valved Dust/Mist Respirator	8822	Yes	Yes	Yes	Cup	-	766-160
	7	Dust/Mist/Metal Fume Respirator	8825+	Yes	Yes	Yes	Cup	-	125-4033
	8	Aura Dust Respirator	9320+	No	No	No	Fold Flat	A	766-0371
	8	Aura Dust Respirator	9320+	No	No	No	Fold Flat	B	742-7499
	9	Aura Valved Dust Respirator	9322+	Yes	No	No	Fold Flat	B	766-0375
	9	Aura Valved Dust Respirator	9322+	Yes	No	No	Fold Flat	A	742-7493
	10	Particulate Respirator	9422+	Yes	No	No	Fold Flat	-	880-6875
	11	Particulate Respirator w/ Nuisance Level	9922	Yes	Yes	Yes	Cup	-	666-7687
	12	Welding Fume Respirator	9925	Yes	Yes	Yes	Cup	-	548-8821
	12	Welding Fume Respirator	9928	Yes	Yes	Yes	Cup	-	409-6588



Product Instruction Language	A	UK, Denmark, Sweden, Norway, Finland, Slovenia, Croatia, Estonia, Latvia, Lithuania, Slovakia, Russian Federation, Serbia, Kazakhstan, Bulgaria, Ukraine, United Arab Emirates
	B	France, Italy, Germany, Turkey, Spain, Portugal, Netherlands, Czech Republic, Romania, Poland, Hungary, Greece, Israel, Australia

PROTECTION CLASS FFP2

Brand	Image	Description	Manufacturer Part No.	Valved	Moulded	Adjustable Nose Clips	Style	Product Instruction Language	RS Stock No.
	1	Organic Vapour Respirator	M1200VPW	Yes	No	Yes	Fold Flat	-	174-823
	2	Moulded Valve Respirator	M1200V	Yes	Yes	Yes	Cup	-	424-538
	3	Arc Welding Respirator	1005595	Yes	Yes	No	Cup	-	409-3157
	4	Toxic Particle Valved Mask	1005586	Yes	Yes	Yes	Cup	-	409-3696
	4	Toxic Particle Mask	1005584	No	Yes	Yes	Cup	-	409-3703
	5	Typhoon Valve Fold Flat Respirator	BEY120-201-100	Yes	No	Yes	Fold Flat	-	736-2311
	6	R20 Dual Valved Respirator	64550	Yes	Yes	Yes	Cup	-	767-2968
	7	Classic Ventex-Valve Respirator	2405	Yes	Yes	No	Cup	-	894-8944
	8	AMF2 AlphaFlow Moulded Respirator	AMF2	No	Yes	No	Cup	-	125-4006
	9	AMF2V AlphaFlow Moulded Respirator	AMF2V	Yes	Yes	No	Cup	-	125-4007
	10	Silv-Air Fold Flat Mask with Valve	8733.21	Yes	No	Yes	Fold Flat	-	130-6097
	11	Silv-Air Fold Flat Carbon Mask with Valve	8733.22	Yes	No	Yes	Fold Flat	-	130-6098
	12	Silv-Air Carbon Cup Mask with Valve	8732.21	Yes	Yes	Yes	Cup	-	130-6099
	13	Silv-Air Cup Mask with Valve	8732.22	Yes	Yes	Yes	Cup	-	130-6100



Product Instruction Language	A	UK, Denmark, Sweden, Norway, Finland, Slovenia, Croatia, Estonia, Latvia, Lithuania, Slovakia, Russian Federation, Serbia, Kazakhstan, Bulgaria, Ukraine, United Arab Emirates
	B	France, Italy, Germany, Turkey, Spain, Portugal, Netherlands, Czech Republic, Romania, Poland, Hungary, Greece, Israel, Australia

PROTECTION CLASS FFP3

Brand	Image	Description	Manufacturer Part No.	Valved	Moulded	Adjustable Nose Clips	Style	Product Instruction Language	RS Stock No.
	1	Cup Shaped Respirator	-	Yes	Yes	Yes	Cup	-	918-5816
	2	Valved Dolomite Respirator	-	Yes	Yes	Yes	Cup	-	918-5829
	3	Fold Flat Respirator	-	Yes	No	Yes	Fold Flat	-	918-5835
	4	Soft Seal Valved Respirator	8833	Yes	Yes	Yes	Cup	-	133-248
	5	Dust/Mist/Metal Fume Respirator	8835+	Yes	Yes	Yes	Cup	-	125-4034
	6	Aura Dust/Fume Respirator	9332+	Yes	No	No	Fold Flat	A	766-0384
	6	Aura Dust/Fume Respirator	9332+	Yes	No	No	Fold Flat	B	742-7503
	7	Particulate Respirator	9432+	Yes	No	No	Fold Flat	-	880-6884
	8	NR D Disposable Face Mask	M1300VPC	Yes	No	Yes	Fold Flat	-	138-0661
	8	NR D Disposable Face Mask	M2FP3V	Yes	Yes	Yes	Cup	-	138-0669
	9	4311 'Dust/Spray/Smoke Respirator	1005630	Yes	No	Yes	Fold Flat	-	525-4066
	10	Typhoon Valve Fold Flat Respirator	BEY130-201-000	Yes	No	Yes	Fold Flat	-	736-2314
	11	R30 Dual Valved Respirator	64590	Yes	Yes	Yes	Cup	-	767-2977
	12	Charcoal Disposable Respirator	2535	Yes	Yes	No	Cup	-	894-8941
	13	Smart Disposable Respirator	2505	Yes	Yes	No	Cup	-	894-8947
	14	AMF3V AlphaFlow Moulded Respirator	AMF-3V	Yes	Yes	No	Cup	-	125-4009
	15	AMF3CV AlphaFlow Moulded Respirator	AMF-3CV	Yes	Yes	No	Cup	-	125-4008
	16	Silv-Air Fold Flat Mask with Valve	8733.31	Yes	No	Yes	Fold Flat	-	130-6101
	17	Silv-Air Cup Mask with Valve	8732.31	Yes	Yes	Yes	Cup	-	130-6102
	17	Silv-Air Cup Mask with Valve (small)	8732.312	Yes	Yes	Yes	Cup	-	130-6103



AIR FED & POWERED RESPIRATORS

Brand	Image	Description	Manufacturer Part No.	Rating When Used With	Mode of Operation	Number of Filters	Head Covered Impact Protection EN397	Powered Nominal Protection Factor	Powered filtering devices incorporating a helmet or a hood EN12941	Eye Protection EN166	RS Stock No.
3M	1	Jupiter™ Powered Respirator Unit	085-00-10P	8285681 3M™ Versflo™ M-306 Helmet	Powered Air System	2	Yes	50	TH2	EN166 1:BT:3 with M-927 Coated Visor EN166 1:BT:3:9 with M-925 Uncoated Visor	410-3850
	2	Versaflo Helmet M-307	M-307	EN12941 TH3 3M™ Versaflo™ TR-302E	Powered Air System	1	Yes	500	TH2	EN166:1:B:3	137-0059
	3	Jupiter™ Powered Respirator Starter Kit	RTUJUPITER	8285681 3M™ Versflo™ M-306 Helmet	Powered Air System	2	Yes	50	TH2	EN166 1:BT:3 with M-927 Coated Visor EN166 1:BT:3:9 with M-925 Uncoated Visor	817-9306
JSP	4	PowerCap Active IP, Universal Plug	CAE602-941-151	Supplied as complete unit	Powered Air System	2	No	10	TH1	Faceshield: EN166:1995 1.3.4.B (IP Version only)	772-0032



FILTERS

Brand	Image	Description	Manufacturer Part No	Type	Filter Type	For Use With	RS Stock No.
3M	1	Versaflo Air filter	450-00-25P2X12	Filter	Particulates	3M Jupiter - 410-3850, 817-9306	410-3894
	1	Versaflo Air filter	453-00-25P2X6	Filter	Organic Gases, Vapours, Particulates	3M Jupiter - 410-3850, 817-9306	410-3917
	1	Versaflo Air filter	453-09-25P2X6	Filter	Organic Gases and Vapours, Inorganic Gases and Vapours, Acid gases, Ammonia, Particulates	3M Jupiter - 410-3850, 817-9306	410-3939
JSP	2	Versaflo Air filter	TR-3710E	Filter	Particulates	3M Versaflo - 737-3651, 136-5563, 136-3625, 136-5564	737-3655
	3	PowerCap Active Filter	CAU601001151	Filter	Dust	JSP Powercap Active - 772-0032	439-0537

ADDITIONAL ACCESSORIES

Brand	Image	Description	Manufacturer Part No	Type	Filter Type	For Use With	RS Stock No.
3M	4	Versaflo Battery Turbo Unit	007-00-64P	Battery	N/A	3M Jupiter - 123-5199, 124-0912, 410-3967, 410-3850, 817-9306	410-3872
	4	Versaflo 4 Hour Battery	0070063P	Battery	N/A	3M Jupiter - 123-5199, 124-0912, 410-3967, 410-3850	817-9312
	5	Versaflo TR-300 Standard Battery Pack	TR-330	Battery	N/A	3M Versaflo - 737-3651, 136-3625, 136-5564, 136-5563	817-9325
	5	Versaflo Turbo Unit	TR-332	Battery	N/A	3M Versaflo - 737-3651, 136-5563, 136-3625, 136-5564, 737-3661	737-3667
	6	Versaflo TR-325 Standard Belt	TR-325	Belt	N/A	3M Versaflo - 737-3651, 136-3625, 136-5564, 136-5563	817-9321
	7	Versaflo BT-30 Adjusting Breathing Tube	BT-30	Breathing Tube	N/A	3M Versaflo, 3M Jupiter - 737-3651, 136-5563, 136-3625, 136-5564, 410-3850, 817-9306	817-9315
	7	Versaflo BT-40 Heavy Duty Breathing Tube	BT-40	Breathing Tube	N/A	3M Versaflo, 3M Jupiter - 737-3651, 136-5563, 136-3625, 136-5564, 410-3850, 817-9306	817-9319
	7	Versaflo BT-20L Breathing Tube	BT-20L	Breathing Tube	N/A	3M Versaflo, 3M Jupiter - 737-3651, 136-5563, 136-3625, 136-5564, 410-3850, 817-9306	712-8622
	8	Intelligent Battery Charger Single Station	52-0000-5343-0	Charger	N/A	3M Jupiter - 817-9312, 410-3872, 817-9306	124-0912
	9	Versaflo Turbo Unit	TR-341	Charger	N/A	3M Versaflo - 737-3651, 136-5563, 136-3625, 136-5564, 737-3667	737-3661
10	Versaflo Compressed Air Supply Tube	3080040P	Compressed Air Tube	N/A	3M Versaflo, 3M Jupiter - 737-3651, 136-5563, 136-3625, 136-5564, 410-3850, 817-9306	817-9303	



ADDITIONAL ACCESSORIES

Brand	Image	Description	Manufacturer Part No	Type	Filter Type	For Use With	RS Stock No.
3M		Versaflo M-306 Respiratory Helmet	M-935	Face Seal	N/A	3M Versaflo - 737-3670, 828-5681, 137-0059	828-5697
		Visor Headtop M-106	M106	Face Shield	N/A	3M Versaflo, 3M Jupiter - 737-3651, 136-5563, 136-3625, 136-5564, 410-3850, 817-9306	737-3670
		Versaflo TR-371+ Replacement Filter Cover	TR-371+	Filter Cover	N/A	3M Versaflo - 737-3655	136-5565
		Versaflo Head Cover	3M S433L Soft Head Top	Head Cover	N/A	3M Versaflo, 3M Jupiter - 737-3651, 136-5563, 136-3625, 136-5564, 410-3850, 817-9306	712-8613
		Versaflo Head Cover	3M S133L Soft Head Top	Head Cover	N/A	3M Versaflo, 3M Jupiter - 737-3651, 136-5563, 136-3625, 136-5564, 410-3850, 817-9306	712-8616
		Versaflo Head Cover	3M S333LG Soft Head Top	Head Cover	N/A	3M Versaflo, 3M Jupiter - 737-3651, 136-5563, 136-3625, 136-5564, 410-3850, 817-9306	712-8619
		Versaflo Helmet Microphone	MT7V/1	Microphone	N/A	3M Versaflo, 3M Jupiter - 828-5681, 137-0059	146-3076
		Versaflo Helmet Microphone	MT53V/1	Microphone	N/A	3M Versaflo, 3M Jupiter - 828-5681, 137-0059	146-3077
		Versaflo Pre-Filter Pad	461-00-02P24X5	Pre Filter	N/A	3M Jupiter - 410-3850, 410-3894, 410-3917, 410-3939	410-3951
		Versaflo V-500 Regulator	V-500	Regulator	N/A	3M Versaflo, 3M Jupiter - 737-3651, 136-5563, 136-3625, 136-5564, 410-3850, 817-9306	817-9309
		Versaflo TR-362 Spark Arrestor	TR-362	Spark Arrestor	N/A	3M Versaflo - 737-3655, 737-3651, 136-3625, 136-5564, 136-5563	817-9337
		Versaflo Visor	M-925	Visor	N/A	3M Versaflo - 737-3670, 828-5681, 137-0059	828-5684
		Versaflo Visor Cover	S-920S	Visor Protector	N/A	3M Versaflo, 3M Jupiter - 712-8613, 712-8616, 712-8619	817-9328
		Versaflo Visor Cover	M-928	Visor Protector	N/A	3M Versaflo - 737-3670, 828-5681, 137-0059	828-5688
	JSP		PowerCap Active Battery	CAU340-001-151	Battery	N/A	JSP Powercap Active - 772-0032
		PowerCap Active Charger	CAU350-000-051	Charger	N/A	JSP Powercap Active - 772-0032	879-2940
		PowerCap Active Filter	CAU610-000-010	Pre Filter	N/A	JSP Powercap Active - 772-0032	879-2952

3M Testing Kit

Respirators are most effective when there is a good seal between the edges of the respirator and the face. The instant this seal is broken, protection is compromised as contaminated air can leak in through any gaps. Users of tight fitting respirators should be fit tested as required by the Control of Substances Hazardous to Health Regulations (COSHH).

There are two kinds of tests: qualitative and quantitative.

Our 3M **qualitative fit test** (QLFT) kits may be used to fit-test:

- Negative-pressure, air-purifying respirators, as long as they'll only be used in atmospheres where the hazard is at less than 10 times the permissible exposure limit (PEL)
- Tight fitting face pieces used with powered and atmosphere-supplying respirators

Two versions of the testing kit are available: FT10 contains all components needed to carry out the test, including sweet tasting sensitivity and fit testing solutions. FT30 contains the same components plus bitter tasting sensitivity and fit testing solutions.

Spare bottles of the solution are available opposite.



Brand	Image	Manufacturer Part No.	Kit Contents	Test Solution Type	RS Stock No.
3M		FT10	Fit Test Solution, Hood & Collar, Instructions, Nebuliser x 2, Sensitivity Solution	Sweet	448-1762
		FT30	Fit Test Solution, Hood & Collar, Instructions, Nebuliser x 2, Sensitivity Solution	Bitter	448-1784

3M Testing Solution

Sensitivity and Fit Testing Solution

Additional bottles of solution for the 3M Qualitative fit test kits.

3M sensitivity and fit testing solutions are sweet tasting (FT11 and FT12) or bitter tasting (FT31 and FT32). The sweet tasting liquids comprise a solution of sodium saccharin, the bitter versions consist of denatonium benzoate to give a very bitter taste.

The choice between the bitter and sweet solutions is a personal one. We suggest having available both so that you have an alternative for persons unable to taste one of them.



Brand	Image	Description	Manufacturer Part No.	Test Solution Type	RS Stock No.
3M		Sensitivity Solution 55 ml	FT11	Sweet	133-232
		Sensitivity Solution 55 ml	FT31	Bitter	133-236
		Fit Test solution 55ml bottle	FT12	Sweet	448-1778
		Fit Test solution 55ml bottle	FT32	Bitter	448-1790

3M Testing Adapter

Quantitative Sampling Adapter

Use the 601 sampling adaptor to conduct quantitative fit testing on 3M face pieces with bayonet style cartridge/filter holders.



Brand	Image	Manufacturer Part No.	RS Stock No.
3M		601	448-2305