

Hazardous substances are formed in many industries and applications. To help you choose the right product solution, 3M assists you to identify and assess the risk in your working environment. 3M's Half and Full Face Masks can be used with a

broad range of filters that offer effective protection against gases, vapours and particles. For prolonged periods of use, Half and Full Face Masks by 3M offer exceptional value and quality, and all combine comfort with ease of use.



1977



3M designs and develops the "bayonetstyle" cartridge connection



1991

3M develops first disc filters with loaded web filter media – the first non-woven, non-fiberglass filters

1989

1992

1987



3M manufactures a "swept-back" designed cartridge for its Facepieces for better peripheral vision and weight distribution



3M develops and incorporates a new integral filter technology in its 4000 Series Facepiece, creating a lighter weight respirator



The Selection of Respiratory Protection Equipment follows a basic 3M four-step method:

- Identify the Hazards dust, metal fume, gas, vapour etc.
- Assess the Risk assess the hazard levels against safety standards and consider other protection eg skin, eye and body
- 3 Select the right Respirator disposable, reusable, half mask, full face, powered, supplied-air
- Train in Fitting and Use to optimise respiratory protection



3M develops first rectangular filter with unique seal-check capabilities



3M develops first HF P3 R nuisance OV filter. Offers lowest breathing resistance on the market



2009

2002

2007

2009

1996

3M launches its 6000 Series Full Facepiece Respirator offering best-in-class field of view and lightweight characteristics



2002

3M introduces Cool Flow™ Exhalation Valve for reduced heat and moisture in the 7500 Half Facepiece Respirator





1. Identify the Hazards

Application	Hazard	Recommended Protection
Painting, Spraying, Varnishing, Coating	Solvent-Based Paint**	A2P3 R
	Anti-Fouling Paint Spraying / Grinding	A2P3 R
	Water Soluble Paint	A1P2 R
	Solvents, Resins, Synthetic Resins**	A2P3 R
	Latex-Paint, Residual Solvents	A2P3 R
	Wood Preservatives	A1P2 R
Maintenance	Disinfection, Cleaning*	ABEK P2 R
Decoration	Spray-On Glue, Foam, Varnish, Adhesive	A1P2 R
Waste Removal	Bacteria, Spores, Odours	A1P2 R
Agriculture	Pesticides, Insecticides	ABEK1P2 R
Wood Treatment	Bonding, Spray-On Glue	A2P3 R
	Tarring	A2P3 R
Construction, Grinding, Cutting, Drilling	Clamming, Sealing	A1P2 R
	Spray Foam Insulation	A1P2 R
	Organic Solvent/with boiling point less than 65 C	AXP3 R
	Ammonia Based Paint Remover	ABEK
Coating	Polyurethane Coating**	ABEP3 R
	Solvent Based Varnish	A2
	Water Based Varnish	A1
Bonding	Solvent containing Adhesives	A1
	Sulphur Dioxide	ABE
	Hydrochloric Acid	ABE
	Liquid Manure	ABEK
Handling	Ammonia	K
	Formaldehyde	A1 + Form
	Hazardous goods storage/transport	ABEKP3 R

This guide is only an outline. It should not be used as the only means for selecting a respirator. Details regarding performance and limitations are set out on the respirator package and user instructions. Before using any of these respirators, the wearer must read and understand the user instructions for each product. Specific country legislation must be observed.

Application limits for re usable half & fullface respirators with gas and vapour filters:

Application limits for the usable half a fulfilace respirators with gas and vapour limites. Half masks can be used up to 500 times TLV (Depending on the filter)

Class 1 filter up to 10 x TLV or 1.000 mg/m3 (0,1 Vol%); Class 2 filter up to 10 x TLV or 5.000 mg/m3 (0,5 Vol%), as the case may be to which limit is reached first.

AX-Filter for low boiling point (organic composition with a low boiling point under 65 °C). AX-Filter should only be fitted to 3MTM Full Face masks. AX filters may only be used for a single shift. A1 and A2 Filter for organic vapour with a boiling point above 65 °C.

2. Assess the Risk

Application limit of Particulate Respirators with removable filter

Application in it of tarticulate recognitions with removable inter			
NPF*		Important Information	
half mask	full face mask	important information	
4	4	not against particles of carcinogenic and radioactive materials, as well as air-transported biological substances of risk-group 2 u. 3 and enzymes	
12	16	not against particles of radioactive materials and air- transported biological substances of risk-group 3 and enzymes	
50	200**		





White - Particulate Protection Brown - Organic Vapours Protection Grey - Inorganic Vapours Protection Yellow – Acid Gases Protection Green – Ammonia and its Derivatives

^{*} excluding Formaldehyde
** for occurance of Isocyanates, please contact the 3M Customer Helpline +44 (0) 870 60 800 60 or your local 3M office



3.1 Select the Right Respirator

3M™ Reusable Respirator Series	4000 Series	3000 Series	6000 Series	7000 Series	6000 Series	7907S
) A ()			
	Half Masks	Half Masks	Half Masks	Half Masks	Full Face Masks	Full Face Masks
Durability	•		•	• •	• •	• •
Maintenance-free	••					
Ready to use	•					
Comfort	••	•	••	••	• •	•
Lightweight	•	• •	• •	•	• •	•
Easy to fit	••	•	•	•	•	•
Adjustable head bands	•	•	•	• •	•	• •
Drop Down feature				••		
Easy-to-clean design		• •	•	• •	• •	•
Quick de-assembly for maintenance				••		
3M™ Cool Flow Valve				••	• •	
Compatible with 3M Supplied Air System			••	••	• •	••
Modular replacement filter system		•	• •	••	• •	• •
Variety of filters	•	•	•	•	• •	••
Eye Protection					• •	• •
Six-point head harness						••
Speaking diaphragm						••
Spare parts			•	••	•	••
Accessories	•	•	••	••	••	••
Multiple sizes available		•	••	••	• •	
Colour coded sizes		•	••	••	••	

3.2 Select the Right Filter





Reusable Respirator Care & Maintenance

3M™ reusable respiratory equipment requires regular checks and maintenance to ensure optimum performance and protection for the wearer. In addition to potentially reducing protection levels, poor maintenance can also reduce the effective lifetime of the equipment, resulting in the additional cost of replacement.

Guidance on the appropriate checks is provided in the instruction booklets with each new item.







3M[™] Bayonet Filter Attachment System

The unique, compatible Bayonet Filter Attachment System allows different types of filters to just be clicked into place ensuring optimum ease of use. 3M Half and Full Face respirators stand out in terms of quality and reliability. The choice of the right mask and filter type depends on your particular working environment and individual requirements. As all respirators have to pass strict quality control tests, they provide a consistently high level of safety. We can help you, so that you can choose which products are suitable to achieve the optimum results. Respirators by 3M offer safety and increase productivity.





3M™ 6000 Series Gas and Vapour Filters

Filter	Protection level	Protection against
6051	A1	organic gases & vapours bp>65 degrees°C
6054	K1	ammonia and derivatives
6055	A2	organic vapours bp>65 degrees°C
6057	ABE1	organic vapours bp>65 degrees°C, inorganic vapours and acid gases
6059	ABEK1	organic vapours (bp>65 degrees°C), Inorganic vapours, acid gases ammonia and its derivatives.
6075	A1+ formaldehyde	organic vanours hn>65 degrees°C and

Filter against gases/vapours and particulate:			
6096	A1 HgP3R	organic vapours, mercury vapours and particulates	
6098*	AXP3R	single compound organic vapours (boiling point below 65 °C) and particulates	
6099*	A2B2E2K2P3 R	organic vapours, inorganic vapours and acid gases, ammonia, derivatives and particulates	
* Only for full face modes			

Only for full face masks.
The filters of the 6000 Series conform with the European Standards: EN14387 and EN143.



3M[™] 2000 Series Particulate Filters

Filter	Protection level	Protection against
2125	P2R	Solid and liquid particles
2128	P2R	Solid and liquid particles. Plus ozone protection 10 x TLV and organic vapours/acid gas below TLV
2135	P3R	solid and liquid particles
2138	P3R	Solid and liquid particles. Plus ozone protection 10 x TLV and organic vapours/



3M™ 6035/6038 Series Particulate Filters

Filter	Protection level	Protection against
6035	P3R	solid and liquid particles – in solid plastic case for rough application
6038	P3R	Solid and liquid particles. Hydrogen Fluoride gas up to 30 ppm and relief from nuisance level ozone, organic vapours and acid gases below TLV in solid plastic case for tough applications



3M[™] 5000 Series Particulate Filters

Filter	Protection level	Protection against	
for combination with gas filters:			
5911	P1R	solid and liquid particles	
5925	P2R	solid and liquid particles	
5935	P3R	solid and liquid particles	
501		filter retainer	



3M[™] 4000 Series Maintenance-Free Reusable Respirators

The 4000 Series Respirators by 3M are a range of ready-to-use, maintenance-free half masks with built in filters designed for effective and comfortable protection against a combination of many gases,

vapours and particulate hazards found throughout industry. Utilising unique filter technology enables a very low-profile design for undisturbed field of vision to make your worklife more comfortable.

Features and Benefits:

Facepiece

- + Low profile design for better peripheral vision
- + Lightweight, well balanced design
- + Soft, non-allergenic material with textured face seal

Built In Filters

- + Four versions available, each offering protection against differing hazards throughout industry
- + One piece, maintenance-free construction

Exhalation Valve

 Central position for effective removal of heat and moisture build up within face piece

Adjustable Head Cradle and Neck Straps

- + Helps to achieve a stable secure fit
- + Easy to fasten neck strap

Cost Effective

 Use until damaged, particulate filters clog, gas filters become saturated

Convenience

+ Resealable bag provides convenient and clean storage between uses

Accessories

+ 3M[™] 400 Overspray Guard is available to help prolong the life of the main particulate filters

Compatible with

- + Eyewear from 3M
- + Hearing Protection from 3M



3M[™] 4000 Series Maintenance Free Respirators available:

3M[™] 4251 Organic vapour* + particulate respirator FFA1P2 R D 3M™ 4255 Organic vapour* + particulate respirator FFA2P3 R D

3MTM 4279
Organic vapour* /
inorganic vapours +
acid gas / ammonia /
particulate respirator
FFABEK1P3 R D

3M™ 4277 Organic vapour* / inorganic vapours + acid gas / particulate respirator FFABE1P3 R D

*Organic vapours boiling point>65 degrees 0

3M™ Accessories for 4000 Series



3M™ 400 Overspray Guard



3M[™] 7500 Series Reusable Half Masks

3M 7500 series reusable half masks have set a new standard in comfort. Reduced breathing resistance helps to minimise heat build-up in the mask and increases your comfort.

Available in three sizes, all masks have the 3MTM Bayonet Attachment System offering a broad range of twin lightweight filters to protect against gases, vapours and particulates depending on your individual needs and can also be used with 3MTM Supplied-Air Systems.

Features and Benefits:

Head Harness

- + Balanced, secure fit
- + Reduced pressure and tension points

Facepeice

- DropDown feature for added convenience during breaks
- + Designed for compatibility with 3M Head and Eye protection
- Soft silicone face piece material for comfort and durability
- + Thin nose bridge area for more comfort
- + Fully maintainable
- + Low weight of 136 gr.

3M[™] Cool Flow[™] Exhalation Valve

- + Less exhalation resistance
- + Easier breathing
- + Less heat and sweat build-up
- + Reduces valve vibration
- + Downwards flow of exhaled air
- + Stays clean

Low-Profile Design

- + Minimises interference with field of view
- + Minimised dirt-traps
- + Reduced fogging with eye protection
- + Sleek look and feel

Filter Connection

- Twin filter design provides lower breathing resistance
- Better weight distribution and more balanced fit
- + Improved peripheral vision
- + Safe and secure fit
- + Optical marking of attachment point
- + Flexible System for gas, vapour, particulate filters
- + Optional supplied-air connection

3M™ 7503 Half Mask EN140:1998

3M[™] 7501 – small (grey blue) Half Mask 3M[™] 7502 – medium (light blue) Half Mask 3M[™] 7503 – large (dark blue) Half Mask





3MTM 7002 Half Mask with rubber face seal and textured nose cup for reduced slippage and skin irritation.

Available in medium (3MTM 7002) and large size – (3MTM 7003) Half Mask

New Ready-to-Use Respirator Packs – 7500 Series



- Compatible with
- + Eyewear from 3M

by different colours

+ Hearing Protection from 3M

+ Full range of spares available

+ Available in three sizes distinguished



3M[™] 6000 Series Reusable Half Masks

The 3M 6000 Series reusable half masks are economical, low-maintenance, simple to handle and lightweight. Available in three sizes, all masks have the 3M[™] Bayonet Connection System allowing connection to a broad range of twin filters to protect against gases,

vapours and particulates depending on your individual needs.

6000 series half masks by 3M can also be used with 3M[™] Supplied Air Systems for your increased convenience and flexibility.

Features and Benefits:

Head Harness

- Designed for compatibility with other 3M Head and Eye protection
- Cradle suspension for comfortable fit
- + Easy to fasten neck strap

Lightweight Elastomeric Face Piece

- + Three colour coded sizes for easier identification
- + Lightweight elastomeric material for comfort during long periods of work
- + Ultra-low weight of 82g
- Reducing maintenance costs to minimum

Low-Profile Design

- + Minimises interference with field of view
- + More simplicity for easy handling

Filter Connection

- Twin filter design provides lower breathing resistance
- Better weight distribution and a more balanced fit
- + Improved peripheral vision
- + Safe and secure fit
- + Optical marking of attachment point
- Flexible System for gas, vapour, particulate filters
- + Optional supplied-air connection

Plus

- + Spare parts available
- Available in three sizes distinguished by different colours

Compatible with

- + Eyewear from 3M
- + Hearing Protection from 3M



3M[™] 6200 Half Mask (medium) EN140:1998

 $3M^{TM}$ 6100 – small (light grey) Half Mask $3M^{TM}$ 6200 – medium (grey) Half Mask $3M^{TM}$ 6300 – large (dark grey) Half Mask

New Ready-to-Use Respirator Packs – 3M 6000 Series reusable half masks



With 3M's new range of reusable Ready-to-Use Respiratory Packs you have a safe solution for most common applications in industry, construction, agriculture and painting. Each pack contains a reusable half mask accompanied by a set of filters to protect against organic gases, vapours and particulates. You can choose between two different filter combinations of A1P2 R and A2P3 R to best meet your individual needs for protection.



3M[™] 3000 Series Reusable Half Masks

The new 3M 3000 Series Respirators are the perfect fit for a tight budget, securing high levels of working protection and comfort at a hard-working price. Compact and light, it moulds itself softly and securely to the contours of your face without blocking your view. You can quickly snapon the relevant gas or combination option and, with the benefit of 3M innovation and quality, keep both your breathing and your mind at ease.

Features and Benefits:

User-friendly

- low profile design allows a wide field of vision
- lightweight makes long period of wear bearable
- soft, elastomeric face piece secures a lasting comfort
- + available in two sizes (S/M and M/L)

Versatile

- snap-on options suitable for a range of chores
- + filter options for organic vapours/gas
- + filter options for a combination of organic vapours and particulates

Great value

- durable, designed to last without weighing you down
- + 3M quality at an affordable price
- + for optimal comfort, choose a respirator that fits well with the other PPE you need for the job

Filter Options

Option 1: For organic vapour protection bp>65 degrees°C



Option 2: For organic gas, vapour and particulate protection



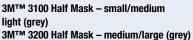












3M[™] 3000 Series Respirator Range



3M[™] 3200/3M[™] 3100 Half Mask



3MTM 3391 A1P2 R
Organic Gas and Vapour
Filter with pre-attached
particulate filter



3M[™] 3351 A1 Organic Gas and Vapour Filter





3M[™] 3212 Organic Vapour Respirator Kit

NEW



3M[™] 6000 Series Reusable Full Face Masks

The 3M 6000 series full face masks are simple to handle and comfortable to wear. The new exhalation port provides increased durability and is easy to keep clean. Available in three sizes, all masks

have the 3MTM Bayonet Connection System enabling connection to a broad range of twin lightweight filters to protect against gases, vapours and particulates depending on your individual needs.

Features and Benefits:

Full Face Piece

- + Soft, non-allergenic elastomeric face piece
- + Extremely lightweight (400 grams) for high comfort

Full Face Lens

- + Broad field of vision
- + Polycarbonate lens, scratch and impact resistant to EN166:2001 B

4 Strap Head Suspension

- + Easy to put on and take off
- + Well balanced

3M[™] Cool Flow[™] Exhalation Valve

- + Less exhalation resistance
- + Easier breathing
- + Less heat and sweat build-up
- + Reduces valve vibration
- + Downwards flow of exhaled air
- + Minimised dirt-traps to stay clean
- + Sleek look and feel

Filter Connection

- Twin filter design provides lower breathing resistance
- + Better weight distribution and more balanced fit
- + Improved peripheral vision
- + Safe and secure fit
- + Optical marking of attachment point
- + Flexible System for gas, vapour, particulate filters
- + Optional supplied-air connection



Plus

+ Available in three sizes: 6700 – small 6800 – medium 6900 – large

Compatible with

+ Hearing Protection from 3M



3M™ 106 Half Mask Carry Bag



3M™ 105 Face Seal Wipe



3M™ 107 Full Face Carry/ Storage Bag



3M[™] 7907S Reusable Full Face Mask

The 3M 7907S full face mask offers durability and safety for demanding tasks that require face and respiratory protection.

The 3MTM Bayonet Connection System offers a broad range of twin lightweight filters to protect against gases, vapours and particulates depending on your individual needs.

The 7907S full face mask by 3M can also be used with Supplied-Air Systems by 3M for your increased convenience and flexibility.

Features and Benefits:

Six Strap Head Harness

- + Easy and secure fit for maximum safety
- + Provides greater stability
- + Easy release buckles

Full Face Lens

- Large polycarbonate lens with wide field of view
- Spectacle kit and lens covers available

Facepiece

- Double face sealing for safe, secure fit to most face sizes
- + 6 Strap suspension
- + Silicone rubber one-size-fits-all
- + Highly durable
- + range of consumables available
- Speech Diaphragm for improved communication

Filter Connection

- + Twin filter design provides lower breathing resistance
- Better weight distribution and more balanced fit
- + Improved peripheral vision
- + Safe and secure fit
- Flexible System for gas, vapour, particulate filters
- + Optional supplied-air connection

Compatible with

+ Hearing Protection from 3M



3M[™] 7907S Full Face Mask (Silicone) EN136 (Class 2)

Accessories for 3M[™] Full Face Masks



3MTM S-200 Regulator EN139:1994 NPF 50 with half mask NPF 200 with full face mask CE Marked