



# RESPIRATORY PROTECTION

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**Dromex**



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## CATEGORIES OF HAZARDS

### Dust

These are particles that vary in size resulting from the breaking up of solids. The smaller the particle the greater the hazard that it presents. Fibres from materials should also be treated as dust particles.

### Mist

These are clouds of fine droplets or particles formed by spraying, which can be water or oil based. Mists are often combinations of several hazardous ingredients formed by processes that involve atomisation and consist of tiny liquid droplets.

### Fume

These are solid aerosols that are formed when metallic vapours condense on cooling and may be produced by welding, galvanising or similar processes involving hot metal.

### Vapour

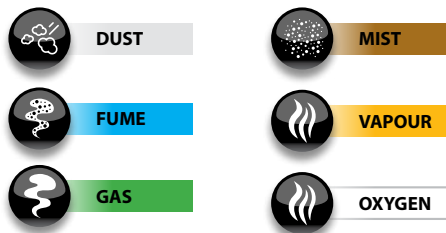
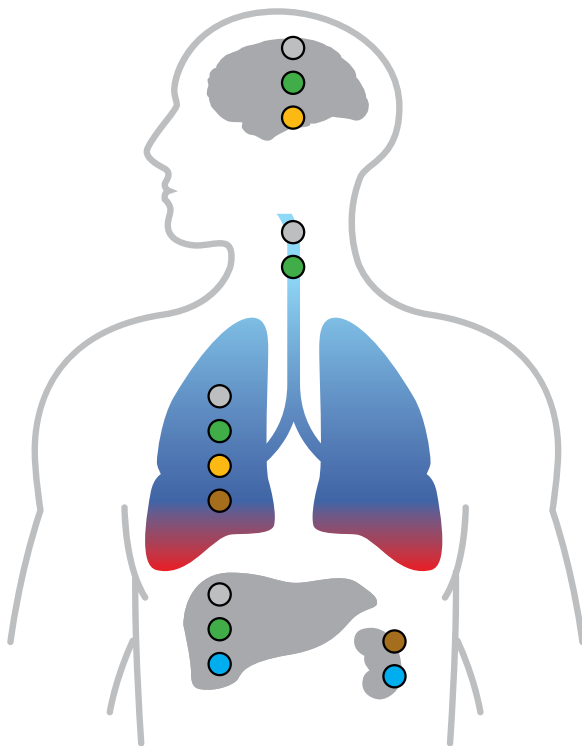
Gaseous state of substances that are liquids or solids at room temperature (vapour). A gaseous state is formed by evaporation from substances that are normally either solid or liquid at room temperature.

### Gas

Are organic or inorganic compounds that become airborne and are able to diffuse or spread freely. Gases can travel very far very quickly.

### $\frac{19\%}{O_2}$ Oxygen Deficiency/Enrichment

When an atmosphere is likely to contain less than 19% oxygen, or where conditions may exist in the future to cause this to happen, the area is considered oxygen deficient and a hazard.



SITE OF DEPOSITION	PARTICLE	HOW THE BODY DEALS WITH THE PARTICLES
UPPER RESPIRATORY TRACT Nasal passage & Pharynx	5-30ppm	Filtered by nasal hair and sneezing
MIDDLE RESPIRATORY TRACT Trachea & Bronchi	1-30ppm	Mucociliary escalator activity increases with irritation
LOWER RESPIRATORY TRACT Alveoli	<1ppm	Dissolution, or uptake by the vascular system with subsequent engulfment by macrophages that move the material to the terminal bronchi to be cleared by the mucociliary escalator



**QUESTIONS TO ASK BEFORE SELECTING RESPIRATORY EQUIPMENT:**

- What is the oxygen content?
- Are there asphyxiants present?
- Is the atmosphere immediately dangerous to life or health?
- Is the atmosphere corrosive or likely to become so?
- Is the atmosphere explosive or likely to become so?
- Is there a potential of permeation of air contaminants?
- What is the contaminant?
- Are there climatic extremes?

Standard	Description	Class	NPF Nominal Protection Factor	APF Assigned Protection Factor
EN 149	Filtering half mask	FFP1	4	4
		FFP2	12	10
		FFP3	50	20
EN 405	Valve filtering half mask	FF Gas X P1	4	4
		FF Gas X	50	10
		FF Gas X P2	12	10
		FF Gas X P3	33	10
EN 140 (Mask) EN 143  EN 14387 EN 12083	Half mask and quarter mask with filter	P1	4	4
		P2	12	10
		P3	48	10
		Gas X	50	10
		Gas X P1	4	4
		Gas X P2	12	10
		Gas X P3	48	10
EN 136 EN 143  EN 14387 EN 12083	Full face mask (all classes)	P1	5	4
		P2	16	10
		P3	1000	40
		Gas X	2000	20
		Gas X P1	5	
		Gas X P2	16	
		Gas X P3	1000	20



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## GAS AND VAPOUR FILTERS:

Filter Type	For use against	Colour Code	Other Information
A	Organic gases and vapours, boiling point > 65°C	Brown	EN 14387
B	Inorganic gases and vapours	Grey	EN 14387 Do not use against carbon monoxide
E	S02 and other acid gases	Yellow	EN 14387
K	Ammonia and its organic derivatives	Green	EN 14387
Hg	Mercury	Red and White	EN 14387, includes P3 particle filter Maximum use time 50 hours No class number
NO	Oxides of Nitrogen	Blue and White	EN 14387, includes P3 particle filter Single use only. No class number
AX	Organic gases and vapours, boiling point < 65°C	Brown	EN 14387 Single use only. No class number
SX	Substance as specified by the manufacturer	Violet	EN 14387

## THE FOLLOWING ADDITIONAL INFORMATION IS PROVIDED TO HELP YOU MAKE DECISIONS:

- Change filters as instructed by the manufacturer, e.g. 'single use only'
- Change before any expiry date marked on the filter
- Do not use if the expiry date on the filters has passed
- Change when damaged or visibly contaminated
- Change before the contaminant can be smelled or tasted
- Change before the filter life indicated in your risk assessment
- For replaceable filters, it would be good practice to mark the filter visibly with the date it was taken out of the packaging and fitted to the RPE; an in-house replacement date can be added to this marking



**3020**



**3021**



**3231**



## PRODUCT INFORMATION

### FLAT FOLD - FFP2

- Low breathing resistance for increased wearer comfort
- Fully adjustable head straps
- Plastic adjustable nose clip
- Soft foam nosepiece for comfort and custom fit
- Suitable for use against solid and liquid based aerosols
- Dolomite tested for resistance to clogging

#### **3020** (NRCS 8072/0167)

- Elasticated head strap

#### **3021 VALVED** (NRCS 8072/0168)

- Elasticated head strap
- Exhalation valve reduces hot air build-up
- Exhalation valve provides easy breathing in hot and humid environments

Complies with EN:149:2001 +A1:2009 FFP2 NR  
Dolomite tested as per BSI test 255/7633484

### **3231 - FFP3 VALVED** (NRCS 8072/0169)

- Low breathing resistance for increased wearer comfort
- Fully adjustable head straps
- Plastic adjustable nose clip
- Contour face seal for performance and comfort
- Exhalation valve reduces hot air build-up and provides easy breathing in hot and humid environments
- Suitable for use against solid and liquid based aerosols
- Dolomite tested for resistance to clogging

Complies with EN:149:2001 +A1:2009 FFP3 NR  
Dolomite tested as per BSI test 255/7633484



**1010**



**1020**



**1021**



**1231**



## PRODUCT INFORMATION

### **1010 - FFP1** (NRCS AZ2004/19)

- Low breathing resistance for increased wearer comfort
- Heavy duty, tab mounted, head straps
- Colour coded plastic adjustable nose clip
- Soft foam nosepiece for comfort and custom fit
- PP inner with no loose fibres

Complies with EN:149:2001 +A1:2009 FFP1 NR  
Complies with AS/NZ 1716-1994 P1

### **1020 - FFP2** (NRCS AZ2004/18)

- Low breathing resistance for increased wearer comfort
- Heavy duty, tab mounted, head straps
- Colour coded plastic adjustable nose clip
- Soft foam nosepiece for comfort and custom fit
- PP inner with no loose fibres

Complies with EN:149:2001 +A1:2009 FFP2 NR  
Complies with AS/NZ 1716-1994 P2

### **1021 - FFP2 VALVED** (NRCS AZ2004/17)

- Low breathing resistance for increased wearer comfort
- Heavy duty, tab mounted, head straps
- Colour coded plastic adjustable nose clip
- Soft foam nosepiece for comfort and custom fit
- Exhalation valve reduces hot air build-up and provides easy breathing in hot and humid environments

Complies with EN 149:2001 + A1:2009 FFP2 NR  
Complies with AS/NZ 1716-1994 P2

### **1231 - FFP3 VALVED** (NRCS AZ2004/15)

- Low breathing resistance for increased wearer comfort
- Fully adjustable head straps
- Colour coded plastic adjustable nose clip
- Contour face seal for performance and comfort
- Exhalation valve reduces hot air build-up and provides easy breathing in hot and humid environments

Complies with EN:149:2001 +A1:2009 FFP3 NR  
Complies with AS/NZ 1716-1994 P3



**1131C**



**1121**



**1121A**



**1121C**



## PRODUCT INFORMATION

### ACTIVE CARBON - FFP2

- Low breathing resistance for increased wearer comfort
- Colour coded plastic adjustable nose clip
- Soft foam nosepiece for comfort and custom fit
- Exhalation valve reduces hot air build-up
- Exhalation valve provides easy breathing in hot and humid environments
- Active carbon pre-filter for nuisance organic vapours and welding fumes

#### **1121** (NRCS AZ2004/16)

- Elasticated head strap

#### **1121A** (NRCS AZ2004/20)

- Heavy duty, tab mounted, adjustable head strap

#### **1121C** (NRCS AZ2004/24)

- Heavy duty, tab mounted, adjustable head strap with contour seal

Complies with EN:149:2001 +A1:2009 FFP2 NR  
Complies with AS/NZ 1716-1994 P2

### **1131- FFP3 VALVED** (NRCS AZ2004/14)

- Low breathing resistance for increased wearer comfort
- Fully adjustable head straps
- Colour coded plastic adjustable nose clip
- Contour face seal for performance and comfort
- Exhalation valve reduces hot air build-up and provides easy breathing in hot and humid environments
- Active carbon pre-filter for nuisance organic vapours, welding fumes

Complies with EN:149:2001 +A1:2009 FFP3 NR  
Complies with AS/NZ 1716-1994 P3



**DH101**



**DH102**



**DH202**



**DH-FFM**



## PRODUCT INFORMATION

### **DH-FFM**

- Polycarbonate anti-mist visor
- TPR 5-point adjustable head harness
- Large face seal flange
- High efficiency exhalation valve
- Separate mask body
- Standard Dromex unifix filters

### **DH101** (NRCS AZ2011/43)

- Soft PVC mask with deep face mould for a comfortable fit with an excellent seal
- Dual wide elastic connected with a pin swivel connector, adjustable and with a quick release toggle
- Efficient exhalation mask
- For use with the single unifix filter cartridge system

### **DH102** (NRCS AZ2011/45)

- Soft PVC mask with deep face mould for a comfortable fit with an excellent seal
- Dual wide elastic connected with a pin swivel connector, adjustable and with a quick release toggle
- Efficient exhalation mask
- For use with the DHCT twin unifix filter cartridge system.

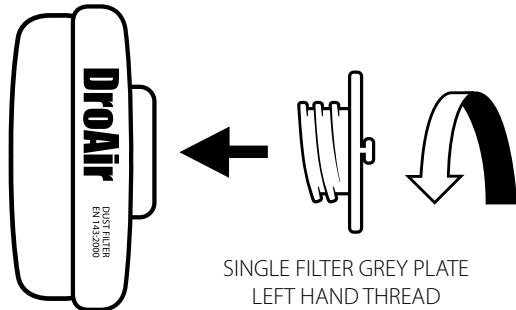
### **DH202** (NRCS AZ2011/46)

- Soft TPR (Thermo Plastic Rubber) with a deep face mould for a comfortable fit with an excellent seal
- Dual wide elastic connected with a pin swivel connector, adjustable and with a quick release toggle
- Efficient exhalation mask
- For use with the DHCT twin unifix filter cartridge system
- Dual wide elastic, connected with a pin swivel connector, adjustable head strap and a quick release toggle



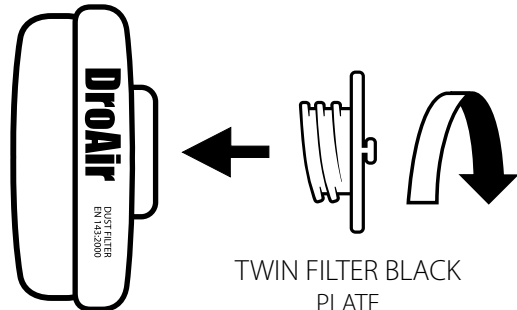
**SINGLE UNIFIT FILTER vs SINGLE UNIFIT FILTER**

**SINGLE UNIFIT FILTERS**



SINGLE FILTER GREY PLATE  
LEFT HAND THREAD

**TWIN UNIFIT FILTERS**



TWIN FILTER BLACK PLATE  
RIGHT HAND THREAD

**SINGLE UNIFIT FILTERS**

These gas, vapour and dust filters are designed to fit the DroAir range of Midi Masks.

The full gas and particulate filter range is colour coded to European standards in EN141, EN143 and EN14387



**DHCS A1 - Organic**

- EN141:2000 (EN14387:2004 +A1 2008)
- NRCS AZ2011/70
- Valve replaced with every filter
- Individually sealed
- Left hand thread for single



**DHCS B1 - Inorganic**

- EN141:2000 (EN14387:2004 +A1 2008)
- NRCS AZ2011/55
- Valve replaced with every filter
- Individually sealed
- Left hand thread for single



**DHCS P2 - Particle**

- EN143:2003
- NRCS AZ2011/67
- Valve replaced with every filter
- Individually sealed
- Left hand thread for single



**DHCS K1 - Ammonia**

- EN141:2000 (EN14387:2004 +A1 2008)
- NRCS AZ2011/71
- Valve replaced with every filter
- Individually sealed
- Left hand thread for single



**DHCS P2PF UNIFIT PRE-FILTER**

The pre-filter kit ensures maximum filter life and can reduce exposure of cartridges, cutting down on unnecessary gas filter changes.

Pre-filters are for fitting to gas filters only.

**WARNING!** Single filters should not be used with twin masks and twin filters should not be used with single masks.

## TWIN UNIFIT FILTERS

These gas, vapour and dust filters are designed to fit the DroAir range of Midi Masks.

The full gas and particulate filter range is colour coded to European standards in EN141, EN143 and EN14387



### DHCT A1 - Organic

- Valve replaced with every filter
- Individually sealed
- Right hand thread for twin
- CE EN 14387:2004 +A1:2008 A1
- NRCS AZ2011/42



### DHCT A2- Organic

- Valve replaced with every filter
- Individually sealed
- Right hand thread for twin
- CE EN 14387:2004 +A1:2008 A2
- NRCS AZ2011/47



### DHCT B1 - Inorganic

- Valve replaced with every filter
- Individually sealed
- Right hand thread for twin
- CE EN 14387:2004 +A1:2008 B1
- NRCS AZ2011/54



### DHCT E1 - Acid gases

- Valve replaced with every filter
- Individually sealed
- Right hand thread for twin
- CE EN 14387:2004 +A1:2008 E1
- NRCS AZ2011/50



### DHCT K1- Ammonia

- Valve replaced with every filter
- Individually sealed
- Right hand thread for twin
- CE EN 14387:2004 +A1:2008 K1
- NRCS AZ2011/53



### DHCT-ABEK 1 - Organic, Inorganic, Acid and Ammonia

- Valve replaced with every filter
- Individually sealed
- Right hand thread for twin
- CE EN 14387:2004 +A1:2008 ABEK1
- NRCS AZ2011/56



### DHCT P2 - Particulate

- Valve replaced with every filter
- Individually sealed
- Right hand thread for twin
- CE EN 143:2000 P2
- NRCS AZ2011/68



### DHCT P3 - Particulate

- Valve replaced with every filter
- Individually sealed
- Right hand thread for twin
- CE EN 143:2000 P3
- NRCS AZ2011/48



**DHCT P2PF UNIFIT PRE-FILTER**  
(NRCS AZ2011/49)



**DHCT P3PF UNIFIT PRE-FILTER**  
(NRCS AZ2011/48)

The pre-filter kit ensures maximum filter life and can reduce exposure of canisters, cutting down on unnecessary gas filter changes. Pre-filters are for fitting to gas filters only.

**WARNING!** Single filters should not be used with twin masks and twin filters should not be used with single masks.