

Dromex



REUSEABLE COMBINATION GAS & PARTICLE CARTRIDGES



DR-ABEK1P3-EN

Description

The Dromex® DR-EN reusable air purifying cartridge filter range is compatible in conjunction with the Dromex® twin cartridge respirators (DH302 and DHFFM) and provides optimum respiratory protection when working in toxic environments containing harmful contaminants, gases and vapours.

These innovative compact gas and particulate carbon filter cartridges are ergonomic, lightweight, low-profile (provides unobstructed worker vision), durable and feature large surface areas for greater loading filter capacity adding to a longer usage.

The activated carbon layer construction removes harmful gases and vapours while neutralizing unpleasant and nauseating odours providing a comfortable experience during use.

The easy thread attachment design ensures the cartridge is securely and conveniently attached onto Dromex® respirators.

The Dromex® DR-ABEK1P3-EN, all in one, combination gas and particulate cartridge, affords the user with the following protection by filtering:

- Organic gases and vapours with boiling points greater than 65°C and good warning properties.
- Inorganic gases and vapours, e.g. Chlorine (not Carbon Monoxide).
- Acid gases and vapours, e.g. Sulphur Dioxide, Hydrogen Chloride.
- Ammonia and organic ammonia derivatives.
- And particulates (highest level of particulate protection).

Application

A full range of respiratory filters is available complying with EN 143 & EN 14387 standards. Refer to the section CARTRIDGE & FILTER SELECTION GUIDE on relevant usage types and international colour codes of respiratory filter. The filters are identified by both EN type number and the colour coded labels.

This cartridge is suitable for use in various environments with exposure to a multitude of gas, vapours chemicals and airborne particulate contaminants used in Oil & Gas, Pharmaceuticals, Chemicals, General Manufacturing and Industry, Painting, Iron and Steel Fabrications, Medical, Utilities, Water Treatment, Construction Welding, Agriculture, Laboratories and Automotive/Aviation Manufacture.

Special Instructions

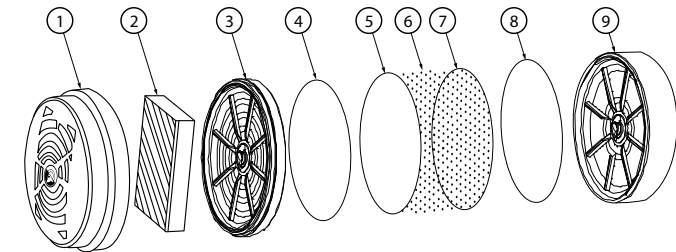
- All respiratory equipment selection should be read in conjunction with BS EN 529:2005 for selection, use care and maintenance.
- Do not use these cartridges or enter in area where:
 - > Filters should not be used in areas that contain an explosive atmosphere, that are deficient of oxygen (below 19%) volume and are not well ventilated. Individual countries may apply their own limits on oxygen deficiency.
 - > Do not use these products in oxygen enriched atmospheres.
 - > Do not use in environments where the air quality is unknown or in atmospheres where the concentrations of toxic contaminants are unknown, or are IDLH (Immediately Dangerous to Life or Health). An IDLH atmosphere is any atmosphere which has a concentration of any toxic, corrosive or asphyxiant substance that poses an immediate threat to life, which would cause irreversible debilitating effects on health, or which would interfere with the ability to escape from dangerous atmospheres.
 - > Gas concentrations exceed levels fixed by the applicable health and safety regulations for the company and country of use.
 - > Do not use these filters near explosives. Please give attention to the fact that while working with open flames or liquid metal droplets, an ignition can occur due the activated carbon composition in the gas or combined filters. There is also a possibility of acute hazardous concentrations of toxic substances that can occur as well.
 - > The requirement for leak tightness is unlikely to be achieved if worn against a beard or facial stubble.
 - > For escape purposes.
- Immediately leave the work area and change the respirator and/or filter if breathing becomes difficult, dizziness or other distress occurs, the respirator is damaged, you sense irritation or smell/taste contaminants in the work area.
- Failure to follow all instructions on use of these respiratory products can affect the wearers health and lead to severe life-threatening illness or permanent disability.
- Do not modify and alter these respirator cartridges.
- Do not interchange parts from different brands of respirators or substitute any other parts from another respirator manufacturer as this will invalidate the performance of the respirator and cartridges.
- None of the materials or processes used in the manufacture of these products are known to be harmful to the wearer.
- Not to be used for firefighting.
- These cartridges do not supply oxygen.
- The lifetime of a filter depends on many factors including the work rate, the air flow and the concentration of the contaminant in the atmosphere. A cartridge/filter should be changed when breathing becomes impaired.
- DO NOT USE THESE TWIN CARTRIDGES WITH DROMEX SINGLE PORT MASKS.
- DO NOT USE PRE-FILTERS OVER PARTICULATE CARTRIDGES
- The manufacturer has examined under the system for ensuring quality of production by means of monitoring and inspection.
- These particulate filters are designed to accommodate the basic safety requirements and standards for Personal Protective Equipment.
- The information contained herein is intended to assist the wearer in the selection of personal protective equipment. Actual conditions of use cannot be directly simulated in a test environment so it is therefore the responsibility of the end user and not the manufacturer or supplier to determine the pre-filter suitability for the intended use.
- All filters should be thoroughly inspected before use to ensure no damage is present. Immediately discard, once open inadvertently and if damaged (eg dents).

Compliance & Conformity

These products meet the requirements of the PPE regulation (EU) 2016/425, and are therefore CE marked accordingly. Quality control of Module D certificate number – CE 784124 and Module B, certificate number - CE 784120 is issued by BSI The Netherlands. Certified as Category III PPE and approved according to standards EN143:2021 and EN14387:2004+A1:2008. CE EN approval as per BSI CE No. 2797 NRCS Homologated as per SANS 54387:2007, Respiratory protective devices Gas filter(s) and combined filter(s) – Requirements, testing, marking. NRCS Type Approval No. : NRCS/8072/0425.

Specifications

Style:	Twin cartridge, re-useable ABEK1P3 combination gas and particulate filter
Breathing Resistance:	@ 15 l/min, maximum 2.2 mbar @ 47.5l/min, maximum 8.2 mbar After clogging test @ 47.5l/min, maximum 9 mbar
Gas Capacity:	Break through time in minutes (BTT) min Cyclohexane (C6H12) BTT >70min @ 10 ml/m3 Chlorine (Cl) BTT >20min @ 0.5 ml/m3 Hydrogen Sulphide (H2S) BTT >40min @ 10 ml/m3 Hydrogen Cyanide (HCN) BTT >25min @ 10 ml/m3 Sulphur Dioxide (SO2) BTT >20min @ 5 ml/m3 Ammonia (NH3) BTT >50min @ 25 ml/m3
Filter Penetration Maximum:	Sodium Chloride @95l/min is 0.05% Paraffin oil @ 95l/min is 0.05%
Filter Efficiency:	99.9%
Maximum Gas Capacity:	1000ppm
Additional:	There are no metal fittings in this device
Materials:	



Item	Part Description
1.	P3 Pre-Filter retainer with over-moulding (Polypropylene + Thermoplastic Elastomer)
2.	P3 Glass Fiber Pre-Filter
3.	ABS (Acrylonitrile Butadiene Styrene) Cartridge Lid
4.	Polyester Sheet
5.	Polyester sheet
6.	ABEK1 Carbon
7.	Polyester sheet
8.	Polyester sheet
9.	ABS (Acrylonitrile Butadiene Styrene) Carbon Cartridge Body

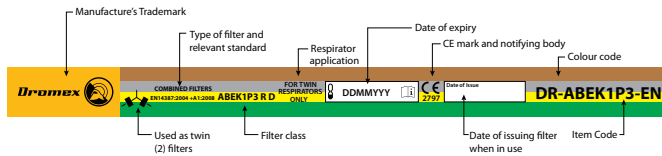
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Latest update: 11/12/2024

Marking



Checks Prior to Use

A competent person should ensure that the correct filter is used for the hazard encountered. If in doubt, consult with an occupational hygienist or supplier. When selecting or fitting a new filter, ensure the filter packaging is intact and the filter is within the shelf life stated.

Instructions for Use

- The Dromex® twin filters should not be used if the expiry date has been exceeded.
- The expiry date can be found on the side of the filter.
- Please ensure that the correct filter has been selected.
- It is imperative that the correct filter assembly is chosen for the relevant mask.
- Fitting a twin filter cartridge onto a single port mask may result in inadequate protection according to the EN standard.
- To ensure the best performance it is important to change the filter cartridge frequently.
- The life of the filter cartridge should be established by a competent person who is fully aware of the conditions in which the respirator is to be used.
- The filter cartridge must be changed if either the resistance to breathing increases or the smell of the hazard is sensed by the wearer
- It is advisable to continue to wear a respirator when leaving the contaminated area until all excess contaminants are removed from clothing etc.

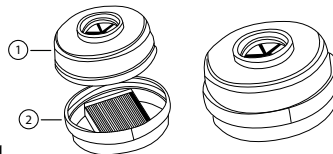
Cartridge Fitting

- Screw the cartridge or filters onto the mask filter connector in a clockwise (right hand) direction as seen below such that it grips the mask.
- Do not over-tighten as this may distort the mask.
- When the filter pad is inserted into the pre-filter cover, place the cover over the front of the cartridge



P3 Pre-Filter Pad with Retainer Fitting

- To replace a pre-filter, Place the reverse end of the P3 pre-filter retainer over the front of the gas cartridge.
- Ensure the soft over-moulding part of the retainer covers and fits securely over the gas cartridge.



Cleaning & Maintenance

- The lifetime of a filter is dependent on many factors including the work rate, airflow and the concentration of the contaminant in the atmosphere.
- A gas cartridge/filter should be changed immediately when chemical breakthrough of a contaminant is detected by smell, taste or any other means.
- A particle filter should be changed when breathing becomes impaired.
- The exterior of the filter can be cleaned with the use of a damp cloth.
- Solvents must not be used and care should be taken to ensure, no water enters the filter. (Cleaning of the filter does not extend its life.)

Packaging, Storage & Obsolescence

Packed as one set (2) of cartridges shrink wrapped in a polybag, preventing contamination. Filters should be stored in a dry, cool environment, away from direct sunlight and contamination.

When not in use or during transportation this filter should be stored in a container, the Dromex® half or full-face mask storage bag or in the packaging provided out of direct sunlight and in dry conditions away from chemicals and abrasive substances to avoid physical contact / damage of any kind.



Cartridge & Filter Selection Guide:

DROMEX PART NUMBER	FILTER TYPE	FOR USE AGAINST	COLOUR CODE	STANDARDS
DR-A1-EN	A1	Organic gases and vapours with boiling points higher than 65°C	Brown (B)	EN14387:2004 + A1:2008
DR-A2-EN	A2			
DR-ABEK1-EN	ABEK1	Multi-type gas filter (Organic gases and vapours with boiling points higher than 65°C, Inorganic gases and vapours, Sulfur dioxide and acidic gases and vapours, Ammonia and organic ammonia derivatives)	Brown (B)/Grey (G)/Yellow (Y)/Green (G)	EN14387:2004 + A1:2008
DR-P2-EN	P2	Particles (Particle filter)	White (W)	EN143:2021
DR-P3OV-EN	P3 OV(carbon)	Particles (Particle filter)	White (W)	EN143:2021
DR-P2PF-EN	P2	Particles (Particle pre-filter used with gas cartridges only)	White (W)	EN14387:2004 + A1:2008 accessories
DR-P3PF-EN	P3	Particles (Particle pre-filter used with gas cartridges only)	White (W)	EN14387:2004 + A1:2008 accessories
DR-A1P2-EN	A1P2 R D	Combined filters (Organic gases and vapours with boiling points higher than 65°C, and particle filter)	Brown (B)/White (W)	EN14387:2004 + A1:2008
DR-A2P3-EN	A2P3 R D			
DR-ABEK1P3-EN	ABEK1P3 R D	Combined filters (Organic gases and vapours with boiling points higher than 65°C, Inorganic gases and vapours, Sulfur dioxide and acidic gases and vapours, Ammonia and organic ammonia derivatives and particle filter)	Brown (B)/Grey (G)/Yellow (Y)/Green (G)/White (W)	EN14387:2004 + A1:2008

GAS FILTER CLASSIFICATION	PARTICLE FILTER CLASSIFICATION	TERMINOLOGY
1 Low capacity filter	1 Low efficiency filter	R - Reusable filter D - Dolomite tested for clogging
2 Medium capacity filter	2 Medium efficiency filter	
3 High capacity filter	3 High efficiency filter	

Filters should be stored at a temperature of +2°C ~ 55°C and a relative humidity below 75% and in accordance with the instructions on packaging. **WARNING!** Storage under conditions other than those specified by the manufacturer that can affect the shelf life.



Shelf Life

The shelf life for gas filters is 4 years if stored correctly. The expiry date of each item is indicated on the cartridge.

Disposal

All industrial waste should be disposed of correctly according to local regulations and good disposal practice. Respiratory protective devices should be disposed of considering the hazardous substances they were used for. Please consider recycling.

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Latest update: 11/12/2024