The CBRNF12CE meets the performance requirements of European standard EN141, A1B2E1K1P3 specification and is approved to PPE directive 89/686/EEC by TNO certification.

When combined with an appropriate chemical protective mask, the CBRNF12CE filter canister protects the face, eyes and gastro-intestinal tract of the wearer against all known chemical and biological agents in aerosol, liquid and vapour form including:

### Threat | Challenge Concentration | Protection Time
---|---|---
Nerve Agent | 940 ppm | >175 mins
Hydrogen Cyanide | 300 ppm | >35 mins
Cyanogen Chloride | 5000 mg/m³ | >60 mins
Chloropicrin | 2500 ppm | >60 mins
Ammonia | 2600 ppm | >15 mins
Cyclohexane | 500 ppm | >20 mins
Formaldehyde | 1000 ppm | >60 mins
Hydrogen sulphide | 200 ppm | >100 mins
Nitrogen dioxide | 250 ppm | >20 mins
Phosgene | 1500 ppm | >20 mins
Phosphine | 1500 ppm | >15 mins
Sulfur dioxide | 1000 ppm | >20 mins

### Effectiveness

**Against Chemical and Biological Agents**

Performance against the gaseous agents specified in the NIOSH CBRN APR standard and also for chemical warfare agents.

Note that the protection time is indicated for standard test conditions. **THIS DO NOT NECESSARILY RELATE TO ACTUAL USE TIMES.**

### Specification

- **Dimensions:** 115 mm diameter x 61 mm height from thread shoulder
- **Weight:** 320 g approx
- **Thread:** 40 mm to NATO STANAG 4155/EN148-1/NIOSH APR CBRN

The filter canister has been tested for particulate aerosols in accordance with NIOSH 42CFR84 P100 using hot DOP aerosol at 85 l/min. The penetration through the canister was found to be less than 0.001% (1 in 10⁵).

The protection against many Toxic Industrial Chemicals (TICs) includes, but is not limited to: organic vapours with a boiling point over 65°C, chlorine, hydrogen sulfide, sulfur dioxide, formaldehyde, phosgene, phosphine and ammonia.

**Construction materials**

- **a.** The canister body is made of Noryl, a polyphenyloxide co-polymer, which is a high quality engineering construction polymer. It provides a very robust product which is extremely durable against shock and impact in operational use. The canister body is black in colour.
- **b.** Gas absorption is by proprietary chrome free activated charcoal impregnated with metallic salts and other compounds to provide a balanced performance against both physically and chemically adsorbed species.
- **c.** The high efficiency filter element is made of glass fibre/vinyon copolymer co-pleated with polypropylene net for structural strength.
- **d.** The CBRNF12CE is entirely non-ferrous and non-magnetic.
PACKAGING
CBRN12 is foil packed and supplied in a box of 4 with 1 instruction leaflet per box. They therefore must be ordered in multiples of 4.

PERFORMANCE

Breathing resistance
480 Pa @ 85 l/min airflow (40mmWG) or less.

Environmental
The materials used and the method of construction of the filter canister has been designed for operation and storage in accordance with NIOSH CBRN criteria. When stored in its original packaging the filter canister retains its operational effectiveness and efficiency with no degradation to its performance under the following environmental storage conditions:

a) Temperature -32°C to 71°C
The filters have been exposed to high and low ambient storage temperatures without harmful effects.

b) Humidity range – 0% to 88% RH
The filter has been tested following storage in high humidity environments and has found to be effective.

c) Rain
The filter will retain its effectiveness in heavy rainfall conditions and it is not prone to water ingress.

d) Salt Breeze
The filter will not deteriorate with exposure to salt breezes for 24 hours.

e) Sand and Dust
The filter will not deteriorate when exposed to 24 hours of wind driven sand and dust conditions.

Shelf life
The predicted shelf life of the filter canister (sealed and packaged) is 5 years.

WARNINGS

- This device does not provide oxygen and must not be used in an oxygen deficient atmosphere or confined space.
- Must not be used for fire fighting or for protection against airborne products of combustion.
- Should only be used as part of a managed respirator program.
- Customer must verify that the filter is suitable for the intended application.
- Respirator filters are not suitable for all gases/vapors. Customer should verify that the filter is suitable for gases/vapors likely to be encountered. Consult Avon if unsure.
- Once exposed to a suspected contaminant, the filter will usually require replacement, and must be disposed of as contaminated waste. Re-use of exposed filters is only permitted in certain controlled circumstances and as part of a managed program, consult Avon if unsure.

The export of the commodities described herein may be subject to U.S export laws and regulations including but not limited to the Arms Export Control Act or the Export Administration Act.

GR12218 - EMEA/CBRNF12CE/DS/070915