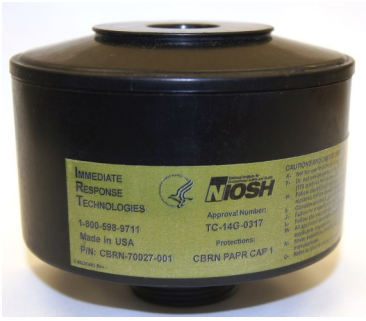
AirBoss Defense
The Ultimate Protection

CBRN CAP 1 FILTER

Technical Data and Manufacturer Certifications



CBRN-70027-001

Part Number:	CBRN-70027-001
Shelf Life:	10 Years (foil bag) Store at room temperature in clean, dry place
Diameter:	4.57 inches (116mm)
Height:	3.50 inches (90mm) overall
Approx. Weight:	14.9 ounces (422 grams) nominal
Connection:	EN 148-1 (40mm) NATO thread
Body Material:	Noryl® GFN1
Breathing resistance:	<50 mm H_2O at airflow rate of 85 lpm
Filter efficiency:	99.97%
Gas Service Life:	CBRN Filter meets or exceeds gas service life requirements for CBRN CAP 1 as specified in NIOSH Statement of Standard CBRN Powered Air Purifying Respirators (PAPR)

Gas/Vapor Challenge	Test Concentration (ppm)	Breakthrough Concentration (ppm)	Service Life (minutes)
Ammonia	2500	12.5	>15
Cyanogen Chloride	300	2	>15
Cyclohexane	2600	10	>15
Formaldehyde	500	1	>15
Hydrogen Cyanide	940	4.7 (1)	>15
Hydrogen Sulfide	1000	5.0	>15
Nitrogen Dioxide	200	1 ppm NO_2 or 25 ppm NO (2)	>15
Phosgene	250	1.25	>15
Phosphine	300	0.3	>15
Sulfur Dioxide	1500	5	>15

(1) Sum of HCN and C_2N_2.

(2) Nitrogen Dioxide breakthrough is monitored for both NO_2 and NO. Breakthrough is determined by which quantity, NO_2 or NO, reaches breakthrough first.

Chemical Agent Permeation and Penetration Resistance:

Agent	Challenge Concentration	Duration of Challenge (minutes)	Breathing Machine Airflow Rate (L/minute)	Maximum Peak Excursion (mg/m^3)	Max. Breakthrough (concentration integrated over minimum service life) ($mg\text{-}min/m^3$)	Minimum Service Life (hours)
HD Vapor	50 mg/m^3	30	40	0.30	3.0	8
HD Liquid	0.43 to 0.86 ml	120	40	0.30	3.0	2
GB Vapor	210 mg/m^3	30	40	0.044	1.05	8

NIOSH Approval: TC-14G-0317 NIOSH approved as part of a complete respirator system

This filter is export-controlled by the Department of Commerce, Bureau of Industry and Security. The Export Administration Regulations must be followed to determine if product can be exported to the country of end use.

CBRN CAP 1 Filter Performance Chart

Organic Vapors:	
Acetone cyanohydrin	**X**
Acrylonitrile	**X**
Allyl alcohol	**X**
Allyl chlorocarbonate	**X**
Benzene	**X**
Bromoacetone	**X**
Bromobenzylcyanide	**X**
Carbon Tetrachloride	**X**
Chloroacetone	**X**
Chloroacetonitrile	**X**
Chloroacetophenone (CN)	**X**

Chloroacetyl chloride	**X**
Chloropicrin	**X**
Chloropivaloyl chloride	**X**
Crotonaldehyde	**X**
Cyclohexane	**X**
Cyclohexyl methyphosphonate	**X**
Dibenz-(b,f)-l ,4-oxazepine (CR)	**X**
Diketene	**X**
Dimethyl methylphosphonate	**X**
Dimethyl sulfate	**X**
Diphenylchloroarsine	**X**
Diphenylcyanoarsine	**X**
Diphosgene	**X**
Distilled mustard	**X**
Ethylbenzene	**X**
Ethyl chloroformate	**X**
Ethyl chlorothioformate	**X**
Ethyl chlorothioformate	**X**
Ethyl phosphonothioicdichloride	**X**
Ethyl phosphorodichloridate	**X**
Ethylene dibromide	**X**
Hexachlorocyclopentadiene	**X**
Hexaethyl tetraphosphate	**X**
Iso-butyl chloroformate	**X**

Iso-propyl chloroformate	X
Lewisite	X
Methanesulfonyl chloride	X
Methyl orthosilicate	X
Methyl parathion	X
Methyl phosphonic dichloride	X
Mustard, lewisite mixture	X
Nitrogen mustard HN-1	X
Nitrogen mustard HN-2	X
Nitrogen mustard HN-3	X
N-propyl chloroformate	X
O-chlorobenzylidene malononitrile (CS)	X
O-ethyl-s-(2isopropyaminoethyl)methyl	X
Parathion	X
Perchloromethyl mercaptan	X
Phenyl mercapatan	X
Phenylcarbylamine chloride	X
Phenyldichloroarsine	X
Phosgene oximedichloroforoxime	X
Phosphonthiolate	X
Phosphorus oxychloride	X
Sarin	X
Sec-butyl chloroformate	X
Soman (GD)	X
Tabun (GA)	X
Tert-octyl mercapatan	X
Tetraethyl dithiopyrophosphate	X
Tetraethyl lead	X
Tetramethyl lead	X
Tetranitromethane	X
Toluene	X
Trimethoxysilane	X
Trimethylacetyl chloride	X
VX	X
Xylene(s)	X

Acid Gases:	
Boron tribromide	**X**
Boron trichlo	**X**
Boron trifloride	**X**
Bromine	**X**
Bromine chloride	**X**
Bromine pentafluoride	**X**
Bromine trifloride	**X**
Carbonyl fluoride	**X**
Chlorine	**X**
Chlorine Dioxide	**X**
Chlorine pentafluoride	**X**
Chlorine tifluoride	**X**
Chlorosulfonic acid	**X**
Cyanogen chloride	**X**
Dichlorosilane	**X**
Ethyl phosphonous dichloride	**X**
Fluorine	**X**
Hydrogen bromide	**X**
Hydrogen chloride	**X**
Hydrogen cyanide	**X**
Hydrogen fluoride	**X**
Hydrogen iodide	**X**
Hydrogen selenide	**X**
Hydrogen sulfide	**X**
Phosgene	**X**
Phosphoric acid	**X**
Phosphorus trichloride	**X**
Silicon tetrafluoride	**X**
Sulfur dioxide	**X**
Sulfur trioxide	**X**
Sulfuric acid	**X**
Sulfuryl chloride	**X**
Titanium tetrachloride	**X**
Tungsten hexafluoride	**X**

Hydride Family:	
Arsine	**X**
Germane	**X**
Phosphine	**X**
Stibine	**X**
Formaldehyde Family:	
Formaldehyde	**X**
Nitrogen Oxide Family:	
Nitric acid	**X**
Nitric acid, fuming	**X**
Nitric oxide	**X**
Nitrogen dioxide	**X**
Nitrogen tetraoxide	**X**
Nitrogen trioxide	**X**
Base Gas Family:	
Allyl amine	**X**
Ammonia	**X**
Dimethyl hydrazine, 1,2	**X**
Methyl hydrazine	**X**
Methylamine	**X**
OSHA Regulated Carcinogens:	
Ethyleneimine	**X**
N-Nitrosodimethylamine	**X**
2-Acetylaminofluorene	**X**
3,3'-Dichlorobenzidine	**X**
4-Aminodiphenyl	**X**
4-Dimethylaminoazobenzene	**X**
4-Nitrobiphenyl	**X**
Alpha-Naphthylamine	**X**
Benzidine	**X**
Beta-Napthylamine	**X**
Beta-Propiolactone	**X**
Bis-Chloromethyl ether	**X**
Methyl chloromethyl ether	**X**

Particulate Family:	
Particulate Chemicals	
Adamsite	**X**
Asbestos	**X**
Di-n-Octylphthalate (DOP	**X**
Poly alpha olefin (PAO)	**X**
Sodium azide	**X**
sodium chloride	**X**
Sodium fluoroacetate	**X**
Particulate Biologicals	
Anthrax	**X**
Botulism	**X**
Brucellosis	**X**
Common Cold and Flu virus'	**X**
Glanders	**X**
Pneumonic Plague	**X**
Query (Q) Fever	**X**
Ricin	**X**
Smallpox	**X**
Staphylococcus enterotoxin B	**X**
T-2 Mycotoxins	**X**
Tularemia	**X**
Venezuelan equine encephalitis	**X**
Viral hemorrhagic fevers	**X**

Particulate Radiologicals	
Americium 241	**X**
Carbon 14	**X**
Cesium 137	**X**
Cobalt 60	**X**
Hydrogen 3*	**X**
Iodine 131	**X**
Nickel 63	**X**

Phosphorous 32	**X**
Plutonium 239	**X**
Promethium 147	**X**
Radium 226	**X**
Radon and Radon Daughters	**X**
Strontium 90	**X**
Technetium 99m	**X**
Thallium 204	**X**
Thorium 232	**X**
Uranium 235 & 238	**X**