

CBRN, HAZMAT & SECURITY FILTERS

FOR RESPIRATORY PROTECTIVE EQUIPMENT



CBRN, HAZMAT & SECURITY FILTERS

FOR RESPIRATORY LAW ENFORCEMENT



- **SCOTT SAFETY CBRN & CIVIL DEFENCE FILTERS**
Chemical, Biological, Radiological and Nuclear (CBRN) agents require the highest levels of protection to safeguard against them. The Scott Safety Military & Civil Defence (M&CD) filter canister range offers a wide choice of filters for specific CBRN, respiratory challenges, providing high quality and cost efficient protection. Highest specification filter media and materials ensure durability and reliability in the most hostile CBRN environments, allowing Military and Civil Defence personnel to maintain operational capability worldwide

CBRN FILTERS

Designed specifically to remediate the lethal effects of Weapons of Mass Destruction (WMDs) and other toxic materials such as Toxic Industrial Chemicals or Materials (TIC's/TIM's), Scott Safety offer filtration solutions to encompass the entire CBRN-HAZMAT threat spectrum. Combining low weight and low breathing resistance, Scott CBRN filters are manufactured using superior performance media, giving extended adsorption capacity for gas and combined filters and unrivalled efficiency for the particle hazard. Scott's M&CD filters are fully EN and NIOSH approved to the latest CBRN standards (BS8468-2 & NIOSH 42 CFR 84), marked 'R' for re-usable (EN 143:2000/ A1:2006), CE certified, and connect via a 40 mm EN148-1 thread. CE approvals: EN143, EN14387 CE0121, CE0403.

HAZARDOUS MATERIAL (HAZMAT) FILTERS

For Protection against specific Toxic Industrial Chemicals (TICs) or Materials (TIM's), such as radiological materials from nuclear power generation, Scott Safety also offers a range of dedicated Pro2000 filters. Encompassing particulate (e.g. for use against certain biological agents), gas (volatile TIC / TIM capability) and combined filters (Broad Spectrum TIC's / TIM capability) Pro2000 filters are fully EN and NIOSH approved to the latest standards, marked 'R' for re-usable (EN 143:2000/ A1:2006), CE certified, and connect via a 40 mm EN148-1 thread. CE approvals: EN143, EN14387. CE0121, CE0403. For the full range of Scott Safety filter canisters please visit www.scottsafety.com.

SECURITY & POLICING FILTERS

The Scott Security & Policing Filter range are designed for the removal of riot control agents and tear gases including CS, CN and OC pepper spray as well as biological and radiological particles. The unique conformal shape provides a low profile close fit with the mask.



CBRN FILTERS

For dedicated Military CBRN applications Scott Safety provide the following filter canisters



TEAR DROP CBRN FILTER

Protects against CBRN Agents including Nerve agents: Sarin (GB), Soman (GD), Tabun (GA), VX. Blood agents: arsine (SA), cyanogen chloride (CK), hydrogen cyanide (AC). Choking agents: chlorine, chloropicrin (PS), diphenylchloroarsine (DA) and phosgene. Blister Agents: H, HD and L. Tear Gas (CN, CS, CR, OC) Toxic Industrial Materials - Chemicals (TIMs/TICs). Gases and vapours from organic compounds with a boiling point above 65°C. Inorganic gases and vapours, e.g. chlorine, hydrogen sulphide, hydrogen cyanide. Acid gases and vapours, e.g. sulphur dioxide. Ammonia and organic ammonia derivatives. Solid and liquid, radioactive and toxic particles and micro-organisms, e.g. bacteria and viruses.

Approved for use against: Ammonia, Chlorine, Chlorine Dioxide, Formaldehyde, Hydrogen Chlorine, Hydrogen Fluoride, Methylamine, Organic Vapours, Sulphur Dioxide, Hydrogen Sulphide and all particulate aerosols. Note: Capacity meets NATO Triptych D103 criteria. Tear Drop CBRN Filter also contains NO chromium as an impregnant.

PART NUMBER: 7000670

NATO STOCK NUMBER (N.S.N) 4240-99-553-8969.



CBRN CAP 1 FILTER

Protects against CBRN Agents including Nerve agents: Sarin (GB), Soman (GD), Tabun (GA), VX. Blood agents: arsine (SA), cyanogen chloride (CK), hydrogen cyanide (AC). Choking agents: chlorine, chloropicrin (PS), diphenylchloroarsine (DA) and phosgene. Blister Agents: H, HD and L. Tear Gas (CN, CS, CR, OC). Toxic Industrial Materials - Chemicals (TIMs/TICs). Gases and vapours from organic compounds with a boiling point above 65°C. Inorganic gases and vapours, e.g. chlorine, hydrogen sulphide, hydrogen cyanide. Acid gases and vapours, e.g. sulphur dioxide. Ammonia and organic ammonia derivatives. Solid and liquid, radioactive and toxic particles and micro-organisms, e.g. bacteria and viruses.

NIOSH CBRN approved for use against: Ammonia, Chlorine, Chlorine Dioxide, Formaldehyde, Hydrogen Chlorine, Hydrogen Fluoride, Methylamine, Organic Vapours, Sulphur Dioxide, Hydrogen Sulphide and all particulate aerosols. Note: Capacity meets a minimum 15-minute test requirement. CBRN Cap 1 Filter contains NO chromium as an impregnant and is also NIOSH approved for use with the C420 Plus Powered Air Purifying Respirator (PAPR) system.

PART NUMBER: 5045135

NATO STOCK NUMBER (N.S.N) 4240-99-958-8264.



CFR32 CBRN A2B2E2K2 P3 R WITH CAP AND PLUG IN ALUMINIUM FOIL BAG

Protects against Gases and Vapours from Organic Compounds with a boiling point above 65°C; inorganic gases and vapours e.g. Chlorine, Hydrogen Sulphide and Hydrogen Cyanide; Acid Gases and Vapours e.g. Sulphur Dioxide; Ammonia and Organic Ammonia Derivatives. Solid and liquid, radioactive and toxic particles, micro-organisms e.g. Bacteria and Viruses.

Certified to EN 14387:2004 and 143. CE 0121 approved for use against: Ammonia, Chlorine, Chlorine Dioxide, Formaldehyde, Hydrogen Chlorine, Hydrogen Fluoride, Methylamine, Organic Vapours, Sulphur Dioxide, Hydrogen Sulphide and all particulate aerosols. Note: Capacity meets a minimum 15-minute test requirement.

PART NUMBER: 5045155



CFR32 CBRN A2B2E2K2 P3 R WITH CAP AND PLUG IN ALUMINIUM FOIL BAG

Protects against Gases and vapours from organic compounds with a boiling point above 65°C, Inorganic gases and vapours, e.g. Chlorine, Hydrogen Sulphide and Hydrogen Cyanide, Acid gases and vapours, e.g. Sulphur Dioxide, Ammonia and organic ammonia derivatives, Other gases and vapours: Phosphine, Formaldehyde, CN, CS, Cyanogen Chloride and Chloropicrin and Solid and liquid toxic and radioactive particulates and micro-organisms, e.g. bacteria and viruses.

Certified to EN 14387:2004 and 143. CE 0121. High capacity TIC-TIM filter approved for use against: Ammonia, Chlorine, Chlorine Dioxide, Formaldehyde, Hydrogen Chlorine, Hydrogen Fluoride, Methylamine, Organic Vapours, Sulphur Dioxide, Hydrogen Sulphide and all particulate aerosols. P/N 5045199 - Filter meets the NIOSH Cap1 criteria.

PART NUMBER: 5543699



CBRN FILTERS

For dedicated Military CBRN applications Scott Safety provide the following filter canisters



CFR32 CBRNA2B2E2K1HGNOCO20-P3RD

Protects against gases and vapours from organic compounds with a boiling point above 65°C, inorganic gases and vapours, e.g. chlorine, hydrogen sulphide, hydrogen cyanide, acid gases and vapours e.g. sulphur dioxide, ammonia and organic ammonia derivatives, Mercury vapour and Mercury compounds, Nitrogen oxides (single use), Carbon Monoxide (single use), solid and liquid toxic and radioactive particles and micro-organisms, e.g. bacteria and viruses.



Certified to EN 14387:2004 +A1:2008, 143 and DIN58620:2007. CE 0403. NOTE! Maximum Operational time of CFR32 CBRNA2B2E2K1HGNOCO20-P3RD is 50 hours (EN 141). For Carbon Monoxide, operational time is single use of 20 mins.

PART NUMBER: 5045071



CFR22 CBRN A2B2E1K1-P3 RD

protects against gases and vapours from organic compounds with a boiling point above 65°C, inorganic gases and vapours, e.g. chlorine, hydrogen sulphide, hydrogen cyanide, acid gases and vapours e.g. sulphur dioxide, ammonia and organic ammonia derivatives (EN 14387), other gases and vapours tested: chloropicrin, cyanogen chloride, sarin, hydrogen cyanide, mustard gas and phosphine as well as CS and CN, Arsine, DMMP, particulates: solid and liquid toxic and radioactive particles and micro-organisms, e.g. bacteria and viruses.



Certified to EN 14387:2004 and 143. CE 0121. Lower Breathing resistance filter, low weight, optimised for military gases (e.g. A2B2). Most suitable for Military use.

PART NUMBER: 5045156



CFR 22 CBRN A1B1E1K1 NOCO20-P3RD

protects against gases and vapours from organic compounds with a boiling point above 65°C, inorganic gases and vapours, e.g. chlorine, hydrogen sulphide, hydrogen cyanide, acid gases and vapours e.g. sulphur dioxide, ammonia and organic ammonia derivatives, Mercury vapour and Mercury compounds, Nitrogen oxides (single use), Carbon Monoxide (single use), solid and liquid toxic and radioactive particles and micro-organisms, e.g. bacteria and viruses.



Certified to EN 14387:2004 +A1:2008, 143 and DIN58620:2007. CE 0403. NOTE! Maximum Operational time of CFR 22 CBRN A1B1E1K1 NOCO20-P3RD is 50 hours (EN 141). For Carbon Monoxide, operational time is single use of 20 mins.

PART NUMBER: 5045081

RADIOLOGICAL (HAZMAT) FILTERS

For the full range of Scott Safety filter canisters please visit www.scottsafety.com



RADIOLOGICAL (HAZMAT) FILTERS

Combined filters remove hazardous gases and vapours as well as solid and liquid particles. The particle filter removes aerosol-based particles such as radioactive dusts and smokes. Therefore makes them ideal for HAZMAT operations involving nuclear clean up or decommissioning, where the threat has already been previously identified



PRO2000 CFR 32 REACTOR HG-P

Protects against Radioactive iodine (¹³¹I) and its organic compounds like methyl iodide, Mercury vapour (Hg) & mercury compounds, Ozone, Solid and liquid particles, radioactive and toxic particles, micro-organisms (e.g. bacteria, viruses and spores) and enzymes.



CE Certified to EN14387, EN141, 143 and DIN3181 Tiel3. NOTE! Maximum Operational time of Reactor Hg-P3 filter is 50 hours (EN 141). When employed against radioactive substances the filter is recommended for single use only (i.e. during one working shift only). This product is not subject to export control. PRO2000 CFR 32 Reactor Hg-P- Filter contains NO chromium as an impregnant

PART NUMBER: 5043679



SECURITY & POLICING FILTERS

For Security & Policing applications Scott Safety offers the following filter canisters



NBC 2200 POLICE CN/CS FILTER

Protects against riot control agents, e.g. tear gas, CN, CS; against organic, inorganic and acid gases and vapours; ammonia and organic ammonia derivatives; highly toxic and radioactive solid and liquid particles, bacteria and viruses. Ideal for RIOT Control & SWAT operations as well as Domestic Preparedness operations, the NBC 2200 makes sense in today's changing world.

The NBC 2200 Police Canister is chromium free and meets unique USA specifications designed for first responders concerned with Riot control, Toxic chemicals, Chemical Warfare Agents and Nuclear hazards.

PART NUMBER: 5045125



CF32 POLICE A2B2E2K1HG NO CO 20-P3RD FILTER

Protects against gases and vapours from organic compounds with a boiling point above 65°C, inorganic gases and vapours, e.g. chlorine, hydrogen sulphide, hydrogen cyanide, acid gases and vapours e.g. sulphur dioxide, ammonia and organic ammonia derivatives, Mercury vapour and Mercury compounds, Nitrogen oxides (single use), Carbon Monoxide (single use), solid and liquid toxic and radioactive particles and micro-organisms, e.g. bacteria and viruses.

Certified to EN 14387:2004 +A1:2008, 143 and DIN58620:2007. CE 0403. Maximum use time of Hg-filter is 50h (EN 14287:2004).

PART NUMBER: 5045072



CF22 POLICE A1B1E1K1 NO CO 20-P3RD FILTER

protects against gases and vapours from organic compounds with a boiling point above 65°C, inorganic gases and vapours, e.g. chlorine, hydrogen sulphide, hydrogen cyanide, acid gases and vapours e.g. sulphur dioxide, ammonia and organic ammonia derivatives, Mercury vapour and Mercury compounds, Nitrogen oxides (single use), Carbon Monoxide (single use), solid and liquid toxic and radioactive particles and micro-organisms, e.g. bacteria and viruses.

Certified to EN 14387:2004 +A1:2008, 143 and DIN58620:2007. CE 0403. Maximum use time of Hg-filter is 50h (EN 14287:2004) Maximum use time of Hg-filter is 50h (EN 14287:2004).

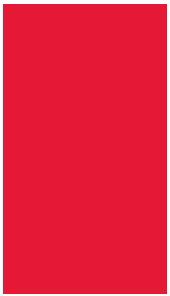
PART NUMBER: 5045082



Filter Selection Criteria

	CBRN Cap 1	CFR 32 CBRN	CFR 22 CBRN	CFR 32 CBRN NOCO	CFR 22 CBRN NOCO	CFR 32 Reactor-Hg P3 RD	GSR Filter	CFR32 Police	CFR22 Police	CFR 22 Police NBC 2200
Category	Mil	Mil	Mil	Mil	Mil	Rad	Mil	Dual	Dual	Dual
Classification	CBRN Cap 1	CBRN Cap 1	A2B2E1K1-P3RD	A2B2E2K1 HgNOCO20-P3RD	A1B1E1K1 NOCO20-P3RD	Reactor Hg-P	CBRN	A2B2E2K1 HgNOCO20-P3 RD	A1B1E1K1 NOCO20-P3 RD	CS/CN/P100
Part Number	5045135	5045155	5045156	5045071	5045081	5043679	7000670	5045072	5045082	5045125
Weight (approx.)	393g	400g	262g	395g	370g	348g	204g	395g	370g	310g
Breathing Resistance (approx.)	4.24 mbar at 85 l min ⁻¹	4.70 mbar at 95 l min ⁻¹	4.10 mbar at 95 l min ⁻¹	5.98 mbar at 95 l min ⁻¹	4.87 mbar at 95 l min ⁻¹	4.90 mbar at 95 l min ⁻¹	2.4mbar at 85 l min ⁻¹	5.98 mbar at 95 l min ⁻¹	4.87 mbar at 95 l min ⁻¹	4.87 mbar at 95 l min ⁻¹
Packing	Plastic barrier	Foil	Foil	Foil	Foil	Plastic barrier	Foil	Plastic barrier	Plastic barrier	Plastic barrier
Shelf Life (if left in packaging)	10 years	10 years	10 years	7 years	7 years	5 years	15 years	7 years	7 years	7 years
Filter Body Style	Standard	Standard	Standard	Standard	Standard	Standard	Tear drop	Standard	Standard	Standard

FILTER SELECTION CRITERIA



Chemical Protection Against										
	CBRN Cap 1	CFR 32 CBRN	CFR 22 CBRN	CFR 32 CBRN NOCO	CFR 22 CBRN NOCO	CFR 32 Reactor-Hg P3 RD	GSR Filter	CFR32 Police	CFR22 Police	CFR 22 Police NBC 2200
Ammonia
Arsine
Asbestos
Bacteria
Benzene
Bromine
Carbon Dioxide	Use Air Supplied Breathing Apparatus whenever asphyxiants such as CO2 may be present in hazardous concentrations									
Carbon Disulphide
Carbon Monoxide	Use Air Supplied Breathing Apparatus whenever asphyxiants such as CO2 may be present in hazardous concentrations									
Carbon Tetrachloride
Chlorine
Chlorine Dioxide
Chloroaceto phenone (CN)
Chloropicrin
2-chlorobenzal malononitrile (CS)
Cyanogen
Cyanogen Chloride (CK)
Cyclohexane
Fluorine
Formaldehyde
Hydrogen Chloride
Hydrogen Cyanide (AC)
Hydrogen Fluoride (HF)
Hydrogen Sulfide
Iodine-Methyl Iodide
Lewisite
Mustard (HD)
Nitrogen Dioxide
Oleoresin Capsicum (OC, pepper gas)
OV for chemicals with BP > 65C
Particulates
Phosgene
Phosphine
Radioactive particulates
Sarin (GB)
Soman (GD)
Sulphur Dioxide
Tabun (GA)
Toluene
Virus
VX
Xylene



WARNINGS

- The above filter recommendations are for guidance only. It is assumed that some filters are used only once and then replaced (e.g. 5045071 for Carbon Monoxide).
- Respirator filters must be selected by a trained and competent person following a suitable and sufficient risk assessment.
- Filters must be used in accordance with appropriate guidelines, regulations or doctrine applied in line with the national legislation of the country of application, inappropriate use could result in injury or death.
- Filters must be stored in accordance with Scott Safety guidance notes.
- The competent person or commanding officer incident must establish a filter change schedule based on a suitable and sufficient risk assessment. Failure to do so may result in filter breakthrough and consequent injury or death. Contact Scott Safety for assistance.
- Filtering respirators are NEVER to be used in oxygen deficient atmospheres (<19.5%) or in poorly ventilated spaces.
- Scott Safety "teardrop" filter are for use on specific Scott Safety masks only. Filters may not seal with other products leading to serious injury or death.



Scott Safety is a global business unit of Tyco International that supplies a variety of industries through manufacturing facilities located in the United States, United Kingdom, Asia, Finland and Australia.
Pimbo Road • Skelmersdale • Lancashire • England • WN8 9RA Telephone: +44 (0) 1695 711711 • Fax: +44 (0) 1695 711772

© 2011 Scott Safety. SCOTT, the SCOTT SAFETY Logo, Scott Health and Safety are registered and/or unregistered marks of Scott Technologies, Inc. or its affiliates.

