PRO2000 FILTERS

FOR RESPIRATORY PROTECTIVE EQUIPMENT

SCOTT SAFETY

SCOTT PRO2000 FILTERS

The Scott Pro2000 canister filter range offers a wide choice of filters for specific respiratory challenges, providing high quality and cost efficient protection. Highest specification filter media and materials ensure durability and reliability in the most demanding applications.

- Combining low weight and low breathing resistance, Scott Pro2000 filters are manufactured using superior performance media, giving extended adsorption capacity for gas and combined filters and unrivalled efficiency for the particle element.

  Pro2000 filters are fully EN 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.

PRO2000 FILTERS

- Particle filters trap solid and liquid particles, e.g. dusts, smoke, welding fumes, mists, micro-organisms and radioactive particles
- Gas filters protect against hazardous gases and vapours
- Combined filters protect against both gaseous and particulate contaminants

- **PARTICLE FILTERS**
  - Scott particle filters use only microfibre 'paper' media and do not use any electrostatic filtering method. They are marked 'R' for "reusable" (EN 143/A1:2006)
  - PF10 P3 features a high capacity filter element; it removes even the smallest particles with efficiency better than 99,99 %
  - The filter element is extremely water-repellent (hydrophobic)

- **GAS FILTERS**
  - Use the highest grade active carbon materials, additionally treated for best performance
  - With a safe margin to EN requirements, Pro2000 gas filters perform effectively using only 220–320 ml of carbon
  - Less carbon provides low weight and less resistance – real benefits for the user

- **COMBINED FILTERS**
  - Combined filters remove hazardous gases and vapours as well as solid and liquid particles
  - The particle filter removes aerosol-based particles such as paint droplets. When spraying liquid substances (e.g. spray-painting) a combined filter should be used.

HOW TO SELECT A FILTER

- Will the atmosphere contain sufficient oxygen throughout the period of exposure?
- Which hazardous substances are likely to be present? What are their physical and chemical properties?
- Which forms do the airborne contaminants take – dust, fibre, mist, fume, microorganism, gas, vapour, radioactive particulates or gases?
- What health effects can these substances have on the body? Special attention is needed if there are several substances that may interact, either by reacting chemically, or by having synergistic adverse health effects.
- What are the concentrations in the atmosphere?
- What are the relevant occupational exposure limit values or the safe exposure levels?

A filtering device should have the correct type of filter matched to the substance(s) from which the wearer needs protection. The maximum mass of filter designated to be connected to a half mask is 300g and to a full face mask 500g. Filters are colour coded, marked with type and class, as well as labelled with the shelf life as factory sealed. The filter label includes the "CE" mark and EN standard number(s), and markings relevant to particular types; if for a powered respirator, the device class.

PARTICULATE CONTAMINANTS

Particle filter classification and efficiency EN 143				
Class	Efficiency	Max permitted penetration		Protection factor 1)
		NaCl (solid, dusts)	Paraffin oil (liquid, aerosols)	
P1	**Low efficiency** (against coarse and minor solid particles)	20 %	20 %	With a half mask 4. With a full face mask 4.
P2	**Medium efficiency** (against solid and liquid hazardous particles)	6 %	6 %	With a half mask 10. With a full face mask 10.
P3	**High efficiency** (against solid and liquid toxic particles, and radioactive particles and microorganisms)	0.05 %	0.05 %	With a half mask 20. With a full face mask 40.

1) BS 4275

PARTICLE FILTER OPERATION LIFE

- The filter does not wear out but gets clogged with particles and/or moisture. A particle filter must be replaced when breathing resistance has increased.
- When used against radioactive substances and micro-organisms a particle filter is recommended for single use only.
- Scott particle filters use only microfibre 'paper' media and do not use any electrostatic filtering methods. Pro2000 filters are fully EN approved to the latest standards, marked 'R' for re-usable and CE marked. Shelf life for Scott particle filters is 10 years.

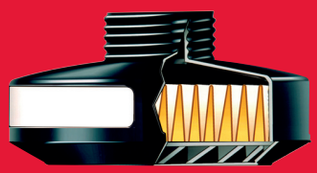
THE RISK CAUSED BY PARTICLES DEPENDS ON:

- The physical, biological and chemical properties of the contaminant
- Particle size and form
- Concentration in the ambient air and exposure time
- Work pace; the more rapid respiration, the more particles are inhaled

Physiological effects of particulates on the human body	
Inert dusts	Minor effects of concentration: e.g. <5 mg/m3 slight irritation, > 30 mg/m3 high irritation.
Mineral dusts, e.g. silica dust, quartz	Detrimental, hazardous effects; changes in lung tissues, cancer
Metal fumes and dusts, e.g. lead, chromium, cadmium, mercury, poisonous particles	Pneumoconiosis, bronchitis, asthma, inflammation, cancer.
Manufactured fibres, e.g. asbestos and other fibres	Pulmonary fibrosis, mesothelioma, cancer.
Airborne radioactive substances	Can cause severe damages, e.g. cancer.
Micro-organisms, e.g. bacteria and viruses	Biological agents can cause diseases, e.g. farmer's lung.

How far the particles break through depends on the particle size – the smaller the size the more detrimental they are	
Particle size	Respiratory tract
> 10 µm	Trachea
> 5 ... 10 µm	Bronchial tube
< 5 µm	Lungs, pleura
< 1 µm	Alveoli
< 0.1 µm	Bloodstream

1 Qm = 0.001 mm



PARTICLE FORMS

DUSTS are airborne solid particles, which are generated during the processing of organic and inorganic substances. Solid particles can be mineral, metal, coal, wood or crop dusts, as well as various fibres.

FUMES, evaporating metal creates fumes during cooling.

SMOKE consists of small coal and soot particles and potentially other partly incinerated materials. It can include both liquid droplets and solid particles.

MISTS are airborne droplets which are created when a fluid disperses in air in the form of small particles.

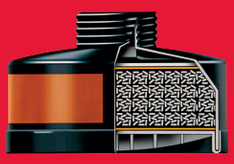
MICRO-ORGANISMS, e.g. bacteria and viruses.

RADIOACTIVE PARTICLES are generated from radioactive material.

SCOTT SAFETY

GASEOUS CONTAMINANTS

GAS FILTER CLASSIFICATION



THE SERVICE LIFE OF A GAS FILTER DEPENDS ON

- Concentration and characteristics of the workplace contaminant
- Filter capacity, e.g. filter class, compare workplace concentrations to test values
- Breathing volume and work rate
- Humidity of the air
- Temperature of the atmosphere

Gases and vapours have various effects on health:

- They can irritate the membranes of respiratory organs, the eyes and skin
- They can reach the lungs and cause damage there
- They can be absorbed in the blood and cause temporary or permanent damage to various parts of the body
- They can cause irrepairable damage to the nervous system
- The most hazardous gases can intoxicate or suffocate, and even destroy individual bodily organs
- They can be lethal

Effects of gaseous substances depend on:

- The characteristics of the gas or vapour; e.g. toxicity
- The concentration of the contaminant in the air
- Duration of exposure to the contaminant
- The chemical compound or mixture of substances making up the contaminant
- The ability to react chemically with organic tissue as well as the propensity to be absorbed in the blood
- Personal characteristics, e.g. rate of respiration, blood circulation and sensitivity

Capacity

Class	Capacity	Max concentration of the test gas. EN 14387. Negative pressure respirators	Max concentration of the test gas. EN 12941 and 12942. Powered and power assisted respirators
1	Low capacity	1.000 ppm (0.1 %)	500 ppm (0.05 %)
2	Medium capacity	5.000 ppm (0.5 %)	1.000 ppm (0.1 %)
3	High capacity	10.000 ppm (1 %)*)	5.000 ppm (0.5 %)

*) NOTE! The test gas concentration with A-filter in class 3. is 0.8 vol.-% (EN 14387).

Gas Filter Capacity EN 14387

Filter type	Test gas	Minimum allowed breakthrough time for the test gas. Class / test gas concentration		
		1. Class	2. Class	3. Class
A	Cyclohexane C_6H_{12}	70 min	35 min	65 min
B	Chlorine Cl_2 Hydrogen sulphide H_2S Hydrogen cyanide HCN	20 min 40 min 25 min	20 min 40 min 25 min	30 min 60 min 35 min
E	Sulphur dioxide SO_2	20 min	20 min	30 min
K	Ammonia NH_3	50 min	40 min	60 min

Special Filters

Filter type	Test gas	Minimum allowed breakthrough time	Test gas concentration
AX	Dimethyl ether CH3OCH3 Isobutane C4H10	50 min 50 min	0.05 vol.-% 0.25 vol.-%
Hg-P3	Mercury, vapour Hg	100 hours	1.6 ml/mg

Gas filter capacity with powered air respirators EN 12941 & EN 12942

Filter type	Test gas	Minimum allowed breakthrough time for the test gas. Class / test gas concentration		
		1. Class	2. Class	3. Class
A	Cyclohexane C_6H_{12}	70 min	70 min	35 min
B	Chlorine Cl_2 Hydrogen sulphide H_2S Hydrogen cyanide HCN	20 min 40 min 25 min	20 min 40 min 25 min	30 min 40 min 35 min
E	Sulphur dioxide SO_2	20 min	20 min	20 min
K	Ammonia NH_3	50 min	50min	40min

COMBINED FILTERS

Combined filters remove hazardous gases and vapours as well as solid and liquid particles. The particle filter removes aerosol-based particles such as paint droplets. When spraying liquid substances (e.g. spray-painting) a combined filter must be used.

PRO2000 FILTERS

Pro2000 Filters					
Colour Code	Code	Filter Type	Application	Weight	Storage Time, years
Particle Filter					
	5052670	PF10 P3 PSL R	Solid and liquid particles of toxic agents, radioactive substances and microorganisms, e.g. bacteria and viruses.	96	10
	5052680	PFR10 P3 R	Solid and liquid particles of toxic agents, radioactive substances and microorganisms, e.g. bacteria and viruses.	96	10
Gas Filter					
	5042870	GF 22 A2	Organic gases and vapours, e.g. solvents with a boiling point above 65ºC.	195	5
	5042871	GF 22 B2	Inorganic gases and vapours, e.g. chlorine, hydrogen sulphide and hydrogen cyanide.	198	5
	5542972	GF 32 E2	Acid gases and vapours e.g. sulphur dioxide.	306	5
	5042873	GF 22 K2	Ammonia and organic ammonia derivates.	257	5
	5542874	GF 22 A2B2	Organic and inorganic gases and vapours.	198	5
	5042979	GF 32 A2B2E2K2	Organic, inorganic and acid gases and vapours as well as ammonia.	322	5
	5042970	GF 32 AX	Gases and vapours from organic compounds with a boiling point below 65ºC.	268	5
Combined Filter					
	5042670 5543070	CF22 A2-P3 PSL R CF32 A2-P3 R	Organic gases and vapours, e.g. solvents with a boiling point above 65ºC, solid and liquid particles, radioactive and toxic particles and micro-organisms.	241 342	5
	5042671	CF22 B2-P3 PSL R	Inorganic gases and vapours, e.g. chlorine, hydrogen sulphide, hydrogen yanide, fluorine, cyanogen chloride, phosgene and solid and liquid particles, radioactive and toxic particles and micro-organisms.	268	5
	5043072	CF 32 E2-P3 R	Acid gases and vapours e.g. sulphur dioxide, hydrogen fl uoride, formic acid, nitric dioxide, solid and liquid particles, radioactive and toxic particles and micro-organisms.	385	5
	5042673	CF 22 K2-P3 R	Ammonia and organic ammonia derivates, solid and liquid particles, radioactive and toxic particles and micro-organisms.	312	5
	5542674	CF22 A2B2-P3/ PSL R	Organic and inorganic gases and vapours, solid and liquid particles, radioactive and toxic particles and micro-organisms	268	5
	5042678	CF22 A2B2E1-P3/ PSL R	Organic, inorganic and acid gases and vapours, solid and liquid particles, radioactive and toxic particles and plus micro-organisms.	268	5
	5042778	CF22 A1E1Hg-P3 PSL R	Organic and acid gases and vapours, mercury and mercury compounds, solid and liquid hazardous particles, e.g. radioactive and toxic substances and micro-organisms.	270	5
	5042799 5543699	CF32 A2B2E2K2-P3 PSL R CFR32 A2B2E2K2-P3R	Organic, inorganic and acid gases and vapours as well as ammonia and organic ammonia derivatives, solid and liquid hazardous particles, e.g. radioactive and toxic substances and micro-organisms.	387 387	5 *) 5
	5042770	CF32 AX-P3 R	Gases and vapours from organic compounds with a boiling point below 65°C, solid and liquid hazardous particles, e.g. radioactive and toxic substances and micro-organisms.	350	5
	5542777 5043679	CF32 Reactor-Hg-P3 R CFR32 Reactor -Hg-P3 R	Mercury and mercury compounds, radioactive iodine and its organic compounds like methyl iodide, solid and liquid hazardous particles, e.g. radioactive and toxic substances and micro-organisms.	331 331	5 5
	5542798	CF 32 AB2E2K2Hg-P3	Organic, inorganic and acid gases and vapours as well as ammonia and organic ammonia derivates, mercury and mercury compounds, solid and liquid particles, radioactive and toxic particles and micro-organisms.	371	5

Key: R = Reusable for the particle filter element
PFR and CFR = Reduced opening
PSL = Approved with selected Scott powered air respirators

*) In aluminium foil package 10 y.

PARTICLE FILTERS

PF10 P3

GAS FILTERS

GF22 A2

GF22 B2

GF32 E2

GF22 K2

GF22 A2B2

GF32 A2B2E2K2

GF32 AX

COMBINED FILTERS

CF22 A2-P3

CF22 B2-P3

CF32 E2-P3

CF22 K2-P3

CF22 A2B2-P3

CF22 A2B2E1-P3

CF32 A2B2E2K2 P3

CFR32 A2B2E2K2 P3

CF32 AX-P3

CF 32 REACTOR-HG-P3

CF 22 A1E1HG-P3

CF 32 A2B2E2K2-HG-P3

SCOTT SAFETY

FILTER SELECTION GUIDE

Explanations: Breathing apparatus = cannot be filtered or high risk: use SCBA or airline, to be specified at the workplace. Isocyanates: please note the document “Scott filters for use against Isocyanates”, available from Scott Customer Services.

NOTE!

This filter selection guide is applicable only to Scott Safety filters (marked Scott or Protector) and does not offer guidance for other manufacturer’s filters. This guide includes Scott’s basic application data of filter types, and does not cover all potential airborne contaminants. While we are glad to provide guidance, responsibility for correct filter selection remains with the health and safety professionals in the workplace. Before choosing a filter a risk assessment must be completed. Hazardous substances in the workplace air must be identified and measured. Airborne contaminant levels must be compared with the relevant occupational exposure limit values or the safe exposure levels (see national guidance). The required protection factor, the RPE to be used and the filter type should be specified with consideration to the properties of the hazardous substances and needs of the wearer, the work and the workplace conditions. A filtering device may be used only if the oxygen content of the air is >17 vol.-% and <23 vol.-%, and not if the airborne contaminants are unknown or if the composition of the atmosphere is likely to change disadvantageously. The recommended minimum oxygen level is 19.5%. In case of doubt, insulating respirators which function independently from the ambient atmosphere (e.g. SCBA or Airline) must be used. Gas filters do not protect against particles. Likewise, particle filters do not provide protection against gases or vapours. In case of doubt, use combined filters.

Substance	Scott Filter
A	
Abate	P3
Acetaldehyde	AX
Acetic acid	B
Acetic anhydride	B
Acetone	AX
Acetonitrile	A
Acetyl bromide	A
Acetyl chloride	B or AX
Acetyl hydroperoxide (Peracetic acid)	B-P3
Acetylperoxide	B-P3 or AX-P3
Acetylene	Use air-line or SCBA
Acetylene tetrabromide	A
Acetylsalicylic acid	P3
Acrolein	AX
Acrylaldehyde	A
Acrylamide	A-P3
Acrylic acid	A, E
Acrylonitrile	A
Aldrin	A-P3
Alkali metals	P3
Allyl alcohol	A
Allyl amine	K, AX
Allyl bromine	A
Allyl chlorine formate	A
Allyl chloride	AX
Allyl glycidyl ether (AGE)	A
Allyl isocyanate	See fact sheet for isocy-anates
Allyl propyl disulfide	B
Aluminium, alkyls	A-P3
Aluminium carbide	Use air-line or SCBA
Aluminium chloride	P3
Aluminium fluoride	P3
Aluminium metal and oxide	P3
Aluminium pyro powders	P3
Aluminium welding fumes	P3
Aluminium, soluble salts	P3
Aluminium sulphate	B-P3
Aminobiphenyl	A-P3
2-Aminobutane	AX
4-Aminodiphenyl	P3
2-Aminoethanol	A
2-Aminopyridine	K-P3
3-Amino-1,2,4-triazole	A-P3
Ammonia	K
Ammonium chloride fume	P3
Ammonium fluoride	P3
Ammonium nitrate	P3
Ammonium perchlorate	P3
Ammonium sulfamate (Ammate)	P3
n-Amyl acetate	A
sec-Amyl acetate	A
Amyl alcohol	A
n-Amylamine	A or K
Amyl mercaptan	B
Aniline & homologues	A
Anisidine (o-, p-isomers)	A
Antimony and compounds (antimonivety = Stibine)	B-P3
ANTU	A-P3
Argon	Use air-line or SCBA
Arsenic & soluble compounds (as As)	P3
Arsenic acid soluble compounds (as As)	P3
Arsine	B
Asbestos	P3
Asphalt (petroleum fumes)	A-P3
Atrazine	P3
Azinphos-methyl	A-P3
Azocarbonamide	P3
B	
Barium, soluble compounds	P3
Barium dioxide	P3
Barium carbonate, barium sulphide, barium chloride, barium chlorate, barium nitrate	P3
Baygon (propoxur)	A-P3
Baytex, see Fenthion	A-P3
Benomyl	A-P3
Benzaldehyde	A
Bentzene	A
Benzidine	A-P3
p-Benzoquinone (see Quinone)	A-P3
Benzotrifluoride-isocyanate	A2B2-P3
Benzoyl peroxide	A-P3
Benzo(a)pyrene	P3
Benzyl chloride	B-P3
Beryllium	P3
Biphenyl	A-P3
Bismuth telluride	P3
Bismuth telluride, Se-doped	P3
Borates, tetra, sodium salts	
- Anhydrous	P3
- Decahydrate	P3
- Pentahydrate	P3
Boron oxide	P3
Boron fluoride-acetic acid compound	B2-P3
Boron tribromide	B-P3
Boron trifluoride	B-P3
Bromacil	A-P3
Bromine	B2
Brombenzyl cyanide	B-P3
Bromine pentafluoride	B
Bromine ethane	AX
Bromochloromethane	AX
Bromoform	A
Butane	AX
Butadiene (1,2-butadiene)	AX
Butanethiol	B
2-Butanone	A
2-Butoxyethanol (Butyl cellosolve®)	A
n-Butyl acetate	A
sec-Butyl acetate	A
tert-Butyl acetate	A
Butyl acrylate	A
n-Butyl alcohol	A
sec-Butyl alcohol	A
tert-Butyl alcohol	A
Butylamine	K or B
Butyl chloride	A
tert-Butyl chromate (as Cro3)	P3
n-Butyl glycidyl ether (BGE)	A
n-Butyl lactate	A
o-sec Butyl phenol	A
p-tert Butyltoluene	A
C	
Cadmium, dust & salts (as Cd)	P3
Cadmium oxide fume (as Cd)	P3
Calcium cyanide	B-P3
Calcium hydroxide	P3
Calcium oxide	P3
Camphor, synthetic	A-P3
Caprolactam	
- Dust	P3
- Vapor	A-P3
Captafol (Difolatan®)	P3
Captan	P3
Carbaryl (Sevin®)	P3
Carbofuran (Furadan®)	P3
Carbon black	P3
Carbon dioxide	Use air-line or SCBA
Carbon disulfide	B-P3 or AX-P3
Carbon monoxide	Use air-line or SCBA
Carbon tetrabromide	A
Carbon tetrachloride	A
Carbonyl chloride (phosgene)	B2-P3
Carbonyl fluoride	B
Catechol (Pyrocatechol)	A-P3
Cellulose (Paper fibre)	P3
Cesium hydroxide	P3
Chlorinated camphene	Use air-line or SCBA
Chlorine	B
Chlorine dioxide	B
Chlorine trifluoride	B2
Chloroacetaldehyde	A
a-Chloroacetophenone	A-P3
Chloroacetyl chloride	A-P3
Chlorobenzene (Monochlorobenzene)	A
o-Chlorobenzylidene malononitrile (CS)	A-P3
2-Chloro-1, 3-butadiene	AX
Chlorodifluorbromomethane	AX
Chlorodiphenyl (42% Chlorine)	A-P3
Chlorodiphenyl (54% Chlorine)	A-P3
1-Chloro-2, 3-epoxypropane (Epichlorohydrin)	A
2-Chloroethanol (Ethylene chlorohydrin)	A
Chloroethylene	AX
bis-Chloroethylether	A-P3
Chloroform (Trichloromethane)	AX
bis-Chloromethyl ether	A-P3
1-Chloro-1-nitropropane	A
Chloropicrin (PS)	A-P3
ß-Chloroprene	AX
o-Chlorostyrene	A
o-Chlorotoluene	A
2-Chloro-6-(trichloromethyl) pyridine (N-Serve®)	P3
Chlorpyrifos (Dursban®)	A-P3
Chromates, certain insoluble forms	P3
Chromic acid and Chromates (as Cr)	P3
Chromite ore processing (chromate) (as Cr)	P3
Chromium, sol. chromic, chromous salts (as Cr)	P3
Clopidol (CoydenR®)	P3
Coal tar	A-P3
Cobalt metal, dust and fume (as Co)	P3
Copper fume	P3
- Dusts & mists (as Cu)	P3
Copper cyanide	B-P3
Cotton dust, raw	P3
Crag® herbicide	P3
Cresol	A-P3
Crotonaldehyde	A
Crufomate	P3
Cumene	A
Cyanamide	B-P3
Cyanides as CN	B-P3
Cyanogen	B
Cyanogen bromide	B2-P3
Cyanogen chloride (CK)	B
Cyclohexane	A
Cyclohexanol	A
Cyclohexanone	A
Cyclohexene	A
Cyclohexylamine	A, K
Cyclotrimethylenenitramine	P3
1,3 Cyclopentadiene	AX
Cyclopropane	Use air-line or SCBA
D	
2,4-D (2,4-Dichlorophenoxy acetic acid) pesticide	P3,
DDT (Dichlorodiphenyltrichloroethane)	P3
DDVP, see Dichlorvos	A-P3
Decaborane	B-P3
Demeton*	Use air-line or SCBA
Diacetone alcohol (4-hydroxy-4-methyl-2-pentanone)	A
1,2-Diaminoethane, see Ethylene diamine	K
Diazinon	A-P3
Diazomethane	B
Diborane	B2
1,2-Dibromoethane, see Ethylene dibromide	A
Dibrom*	A-P3
2-n-Dibutylaminoethanol	A
Dibutyl phosphate	A-P3
Dibutyl phthalate	A-P3
Dichloracetylene	Use air-line or SCBA
o-Dichlorobenzene	A
p-Dichlorobenzene	A
3,3`-Dichlorobenzidine	P3
Dichlorodifluoromethane (Freon-12)	Use air-line or SCBA
1,1-Dichloroethane	AX
1,2-Dichloroethane	A
1,2-Dichlorethylene	AX
Dichloroethyl ether	A
Dichlorofluoromethane	Use air-line or SCBA
Dichloromethane, see Methylene chloride	AX
1,1-Dichloro-1-nitroethane	A
1,2-Dichloropropane, see Propylene chloride	A
Dichloropropene	A
2,2-Dichloropropionic acid	A
Dichlorvos (DDVP)	A-P3
Dicrotophos (Bidrin®)	A-P3
Dicyclopentadiene	A-P3
Dicyclopentadienyl iron	P3
Dieldrin	A-P3
Diethylamine	AX
2-Diethylaminoethanol	A, K
Diethylene triamine	K, A
Diethyl ether, see Ethyl ether	AX
Diethyl phthalate	A-P3
Difluorodibromomethane	AX
Diglycidyl ether (DGE)	A
o-Dihydroxybenzene	P3
Diisobutyl ketone	A
Diisopropylamine	A, K
Dimethoxymethane, see Methylal	AX
Dimethyl acetamide	A
Dimethylamine	K2
Dimethylaminobenzene, see Xylidine	A
Dimethylaniline (N,N-Dimethylaniline)	A-P3
Dimethylbenzene, see Xylene	A
Dimethylcarbamyl chloride	B-P3
Dimethyl ether	AX
Dimethylformamide	A
1,1 Dimethylhydrazine	K, AX
Dimethylphthalate	A-P3
Dimethyl sulphate	A-P3
Dinitrobenzene (all isomers)	B-P3
Dinitro-o-cresol	B-P3
3,5-Dinitro-o-toluamide (Zoalene®)	B-P3
Dinitrotoluene	B-P3
p-Dioxane and 1,4-Dioxane	A
Dioxathion (Delnav®)	P3
Diphenylamine	P3
Diphenylmethane diisocyanate (MDI)	See fact sheet for isocy-anates
Dipropylene glycol methyl ether	A
Diquat	P3
Di-sec-octyl phthalate (Di-2-ethylhexylphthalate)	A-P3
Disulfuram	P3
Disulfoton (Disyston®)	P3
2,6-Di-tert-butyl-para-cresol	A-P3
Diuron	A-P3
Divinyl benzene	A
Dyfonate*	A-P3
E	
Emery	P3
Endosulfan (Thiodan®)	P3
Endrin	P3
Epichlorohydrin	A
EPN (Phosphorothioic acid)	P3
1,2-Epoxypropane	AX
2,3-Epoxy-1-propanol	AX
Ethanethiol	AX
Ethanol (ethyl alcohol)	A
Ethion (Nialate®)	P3
2-Ethoxyethanol	A
2-Ethoxyethyl acetate (Cellosolve acetate)	A
Ethyl acetate	A

Substance	Scott Filter
Ethyl acrylate	A
Ethyl alcohol (Ethanol)	A
Ethyl amine	K or AX
Ethyl amyl ketone (5-Methyl-3-heptanone)	A
Ethyl benzene	A
Ethyl bromide	AX
Ethylbutyl ketone (3-heptanone)	A
Ethyl chloride	AX
Ethylene chlorohydrin	B
Ethylene glycol,	
- Particulate	P3
- Vapour	A
Ethylene glycol dinitrate and/or Nitroglycerin	B
Ethylene glycol methyl ether acetate (Methyl cellosolve® acetate)	A
Ethylene oxide	AX
Ethylenimine	K2
Ethyl formate	AX
Ethylidene norbornene	A
n-Ethylmorpholine	A
Ethyl silicate	A
F	
Fensulfothion (Dasanit)	P3
Fenthion	A-P3
Ferbam	P3
Ferrovanadium dust	P3
Fluorine	B
Formaldehyde	B2
Formamide	A
Formic acid	E
Furfural	A
Furfuryl alcohol	A
G	
Gasoline	AX
Germanium tetrahydride	B2-P3
Glass, fibrous or dust	P3
Glutaraldehyde	A-P3
Glyserol, mist	A-P3
Glyserol trinitrate	A
Glycol ethers	A
H	
Hafnium	P3
Helium	Use air-line or SCBA
Heptachlor	A-P3
Heptane (n-Heptane)	A
Hexachlorobutadiene	A
Hexachlorocyclopentadiene	A
Hexachloroethane	A-P3
Hexachloronaphthalene	P3
Hexafluoroacetone	AX
Hexamethyl phosphoramide	A-P3
n-Hexane	A
2-Hexanone, see Methyl n-butyl ketone	A
Hexone, see Methyl isobutyl ketone	A
sec-Hexyl acetate	A
Hexylene glycol	A
Hydantoin	P3
Hydrazine	K-P3
Hydrogen, liquid	Use air-line or SCBA
Hydrogenated terphenyls	A-P3
Hydrogen bromide	B-P3, E-P3
Hydrogen chloride	E-P3
Hydrogen cyanide	B2
Hydrogen fluoride	E-P3
Hydrogen peroxide	Use air-line or SCBA
Hydrogen selenide (as Se)	B
Hydrogen sulfide	B
2-Hydroxypropyl acrylate	A
I	
Indene	A
Indium & Compounds (as In)	P3
Iodine	B-P3
Iodoform	A-P3
Iron oxide fume (Fe2O3) (as Fe)	P3
Iron salts, soluble (as Fe)	P3
Isoamyl acetate	A
Isoamyl alcohol	A
Isobutane	AX
Isobutane	A
Isobutylene	AX
Isobutyl acetate	A
Isobutyl alcohol	A
Isocyanates	See fact sheet for isocyanates
Isohexane	AX
Isophorone	A
Isophorone diisocyanate	See fact sheet for isocyanates
Isopropyl acetate	A
Isopropyl alcohol	A
Isopropylamine	K or AX
n-Isopropylaniline	A
Isopropyl ether	A
Isopropyl formiate	A
Isopropyl nitrate	B
Isopropyl glycidyl ether (IGE)	A
K	
Kaolin	P3
Ketene	Use air-line or SCBA
L	
Lead, inorg., fumes & dust (as Pb)	P3
Lead alkyls	A-P3
Lead arsenate (as Pb)	P3
Lead chromate (as Cr)	P3
Lead nitrate	P3
Lead sulphate	P3
d-Limonene	A
Lindane	A-P3
Lithium	P3
Lithium hydride	P3
M	
Magnesium, powder	P3
Magnesium oxide fume (as Mg)	P3
Magnesium nitrate	P3
Magnesium perchlorate	P3
Malathion	A-P3
Maleic anhydride	A-P3
Manganese (as Mn)	P3
Manganese fume (as Mn)	P3
Manganese tetroxide	P3
Melamine	Use air-line or SCBA
Mercaptan	B
Mercury (Alkyl compounds) (as Hg)	Hg-P3
Mercury (all forms except alkyl) (as Hg)	Hg-P3
Mesityl oxide	A
Methane	Use air-line or SCBA
Methanethiol, see Methyl mercaptan	B, AX
Methomyl (Lannate®)	P3
Methoxychlor	A-P3
2-Methoxyethanol (Methyl cellosolve®)	A
Methyl acetate	AX
Methyl acetone	A
Methyl acetylene (propyne)	Use air-line or SCBA
Methyl acrylate	A
Methyl acrylonitrile	A
Methylal (dimethoxymethane)	AX
Methyl alcohol (Methanol)	AX
Methylamine	K, AX
Methyl amyl alcohol	A
Methyl n-amyl ketone (2-Heptanone)	A
Methyl bromide	AX
Methyl butyl ketone	A
Methyl cellosolve®	A
Methyl chloride	AX
Methyl chloroform (1,1,1-Trichloroethane)	A
Methyl 2-cyanoacrylate	B2-P3
Methylcyclohexane	A
Methylcyclohexanol	A
o-Methylcyclohexanone	A
Methyl demeton	P3
Methylene acetone	A
Methylene bisphenyl diisocyanate (MDI)	See fact sheet for isocyanates
Methylene bromide	A
Methylbromide	AX
4,4`-Methylene bis (2-chloraniline) MbOCA	A-P3
Methylene bis (4-cyclohexylisocyanate)	See fact sheet for isocyanates
4,4'-Methylene dianiline	A-P3
Methyl ethyl ketone (MEK)	A
Methyl ethyl ketone peroxide	B-P3
Methyl formiate	AX
Methyl hydrazine	K2
Methyl iodide	Reactor Hg-P3 or AX
Methyl isoamyl ketone	A
Methyl isobutyl ketone (MIBK)	A
Methyl isocyanate	See fact sheet for isocyanates
Methyl ketone	AX
Methyl methacrylate	A
Methyl mercaptan	B, AX
Methyl parathion	A-P3
Methyl propyl ketone	A
Methyl silicate	A
α-Methyl styrene	A
Methyl vinyl ether	AX
Mevinphos	A-P3
Molybdenum (as Mo)	
- Soluble compounds	P3
- Insoluble compounds	P3
Monochlorodifluoroethane (Freon 142)	Use air-line or SCBA
Monocrotophos	P3
Monomethyl aniline	A
Morpholine	A
MTBE	AX
N	
Naphthalene	A-P3
Naphthylamine	K-P3 or A-P3
Neon	Use air-line or SCBA
Nickel carbonyl	Use air-line or SCBA
Nickel metal	P3
Nicotine	A-P3
Nitric acid	E-P3
Nitric oxide	Use air-line or SCBA
p-Nitroaniline	A-P3
Nitrobenzene	A-P3
p-Nitrochlorobenzene	B-P3
4-Nitrodiphenyl	P3
Nitroethane	B
Nitrogen dioxide	Use air-line or SCBA
Nitrogen oxide	Use air-line or SCBA
Nitrogen trifluoride	B
Nitroglycerin	B
Nitromethane	B
1-Nitropropane	B
2-Nitropropane	B
n-Nitrosodimethylamine (dimethylnitrosoamine)	A-P3
Nitrotoluene	B
Nitrotrichloromethane see, Chloropicrin (PS)	A
Nitrous oxide (laughing gas)	Use air-line or SCBA
Nonane	A
O	
Octachloronaphthalene	A-P3
Octane	A
Oil mist, mineral	P3
Organic dust	P
Osmium tetroxide (as Os)	A-P3
Oxalic acid	P3
Oxygen	Use air-line or SCBA
Oxygen difluoride	B2
Ozone	AB-P3, ABEK-P3
P	
Paraffin wax fume	P3
Paraldehyde	A
Paraquat, respirable sizes	P3
Parathion	A-P3
Particulate polycyclicaromatic hydrocarbons	A-P3
PCB polychlorinated bifenyls	A-P3
Pentachlorethane	A
Pentachlorphenol	AP3
Pentane, isopentane	AX
Perchloric acid	B-P3
Perchloroethylene	A
Perchloromethyl mercaptan	B-P3
Perchloryl fluoride	B
Phenol	A
Phenothiazine	P3
n-Phenyl-ß-Naphthylamine	P3
p-Phenylene diamine	P3
Phenyl ether (vapour)	A-P3
Phenyl ether-Diphenyl mixture (vapour)	A-P3
Phenyl glycidyl ether (PGE)	A
Phenylhydrazine	A-P3, K-P3
Phenyl mercaptan	B
Phenylphosphine	B
Phorate (Thimet®)	P3
Phosdrin (Mevinphos®)	A-P3
Phosgene (carbonyl chloride)	B2-P3
Phosphine	B
Phosphoric acid	B-P3
Phosphorous (yellow, white)	P3
Phosphorus pentachloride	B-P3
Phosphorus pentasulfide	B-P3
Phosphorus trichloride	B-P3
Phthalic acid anhydride	A-P3
m-Phthalodinitrile	P3
Picloram (Tordon®)	P3
Picric acid	P3
Pival® (2-Pivalyl-1,3- indandione)	P3
Platinum (Soluble salts) (as Pt)	P3
Polychlorobiphenyls, see Chlorodiphenyls	A-P3
Potassium hydroxide	P3
Propane	Use air-line or SCBA
Propargyl alcohol	A
ß-Propiolactone	A-P3
Propionic acid	A
n-Propyl acetate	A
Propyl alcohol	A
n-Propyl nitrate	B
Propylene	Use air-line or SCBA
Propylene glycol dinitrate	B
Propylene glycol monomethyl ether	A
Propylene imine	AX
Propylene oxide	AX
Propyne, see Methyl acetylene	Use air-line or SCBA
Pyrethrum	P3
Pyridine	A
Q	
Quartz	P3
Quinone	A-P3
R	
Resorcinol	A-P3
Rhodium, metal fume and dust (as Rh)	P3
- Soluble salts (as Rh)	P3
Ronnel	A-P3
Rotenone	A-P3
Rouge	P3
S	
Sarin (GB)	B-P3
Selenium	P3
Selenium hexafluoride	Use air-line or SCBA
Silicon	P3
Silicon tetrahydride (Silane)	Use air-line or SCBA
Silver, metal	P3
Sodium	P3
Sodium azide	P3
Sodium bisulfite	E-P3
Sodium fluoroacetate (1080)	P3
Sodium hydroxide	P3
Sodium metabisulfite	E-P3
Soman (GD)	B-P3
Stibine	B2
Stoddard solvent	A
Strychnine	P3
Styrene monomer	A
Sulfur dioxide	E
Sulfuric acid	E-P3
Sulfur monochloride	B
Sulfur hexafluoride	Use air-line or SCBA
Sulfur tetrafluoride	B2
Sulfuryl fluoride	B
T	
2,4,5-T	P3
Tabun (GA)	B-P3
Tantalum	P3
TEDP	A-P3
Tellurium & compounds (as Te)	P3
Tellurium hexafluoride (as Te)	A
TEPP	A-P3
Terphenyls	A-P3
1,1,1,2-Tetrachloro-2,2-difluoroethane	A
1,1,2,2,-Tetrachloro-1,2-difluoroethane	A
1,1,2,2,-Tetrachloro, ethane	A
Tetrachloronaphthalene	P3
Tetraethyl lead (as Pb)	A-P3
Tetrahydrofuran	A
Tetramethyl lead (as Pb)	A-P3
Tetramethyl succinonitrile	A-P3
Tetranitromethane	B
Tetrasodium pyrophosphate	P3
Tetryl (2,4,6-trinitrophenyl-methylnitramine)	P3
Thallium	P3
4,4`-Thiobis (6-tert-butyl-m-cresol)	P3
Thiram®	P3
Tioglycolic acid	B
Tin, inorganic compounds, except SnH4 and SnO2	P3
Tin, organic compounds (as Sn)	A-P3
Tin oxide (as Sn)	P3
Titanium dioxide (as Ti)	P3
Toluene (Toluol)	A
Toluene-2, 4-diisocyanate (TDI)	See fact sheet for isocyanates
o-Toluidine	A-P3
Tributyl phosphate	A-P3
Trichloroacetic acid	B
1,2,4-Trichlorobenzene	A
1,1,1-Trichloroethane, see Methyl chloroform	A
Trichloroethylene	A
Trichlorofluoromethane (Freon-11)	Use air-line or SCBA
Trichloromethane, see Cloroform	AX
Trichloronaphthalene	A-P3
1,2,3-Trichloropropane	A
1,1,2-Trichloro 1,2,2-trifluoroethane	Use air-line or SCBA
Tricyclohexyltin hydroxide (Plictran®)	P3
Triethylamine	A
Trifluorobromomethane	Use air-line or SCBA
Trimethyl benzene	A
Trimethyl phosphite	B
2,4,6-Trinitrotoluene (TNT)	B
Triorthocresyl phosphate	A-P3
Triphenylamine	A-P3
Triphenyl phosphate	P3
Tungsten	P3
Turpentine	A
U	
Uranium (natural)	P3
Urethane	A-P3
V	
Vanadium, (V2O5) (as V)	
- Dust	P3
- Fume	P3
Valeraldehyde	A
Vinyl acetate	A
Vinyl benzene, see Styrene	A
Vinyl bromide	AX
Vinyl chloride	AX
Vinyl cyclohexene dioxide	A
Vinylidene chloride	AX-P3
Vinyl toluene	A
VX	B-P3
W	
Warfarin	P3
White spirit	A
Wood dust	P3
X	
Xylene (o-, m-, p-isomers)	A
Xylidine	A-P3
Y	
Yttrium	P3
Z	
Zinc chloride fume	P3
Zinc chromates (as Cr) (incl. Zinc potassium chromate)	P3
Zinc oxide fume	P3
Zinc stearate	P3
Zirconium compounds (as Zr)	P3

Pro2000 Filters

Used in conjunction with the Scott Safety Respiratory range, Pro2000 Filters offer a high performance solution to a wide range of respiratory hazards. Pro2000 filters can be utilised with both negative pressure and powered air respirators.

ORDERING INFORMATION

PRO2000 FILTERS - ACCESSORIES

Accessories for Pro2000 filters	
Part Number	**Description**
5052691	Prefilter discs Pro2000 (set of 20)
5052692	Prefilter and holder Pro2000 (incl. 2 holders + 6 prefilters)
5052690	Spark arrester Pro2000 (incl. 2 holders + 2 aluminium spark arresters)
5052693	Seal cover Pro2000 LD polyethylene (2 covers)
5052694	Shower cover Pro2000, EPDM

RESTRICTIONS ON USE
Standard filtering respirators do not protect against certain gases, e.g. CO_2 (carbon dioxide)
The storage time (month and year) for a filter is marked on the filter label. The above-mentioned storage times for Pro2000 filters are for a factory sealed filter package. Filters are sealed in plastic or foil bags by the manufacturer. Manufacturer recommends storage at - 10...+50 °C temperature and relative humidity below 75%.
After use, an opened filter must be wrapped closely, if it is likely to be reused, and it must be replaced not later than within 6 months.
If the user identifies the breakthrough of the gas by smell, taste or irritation factor the filter must be replaced.
When a hazardous gas has an olfactory threshold higher than the occupational exposure limit it produces no clear breakthrough sign. In these cases special directions regarding the calculated lifetime are required.
The filter must be changed if the breathing resistance has increased noticeably.
Maximum permitted time for use of the mercury filter Hg-P3 (applies also to filters A2B2E2K2Hg-P3, A1E1Hg-P3, Reactor Hg- P3) is 50 hours (EN 14387).
AX-filter is for single use only, and should be replaced after each shift (EN14387).
Against radioactive substances and microorganisms a particle filter is recommended for single use only.

FOR MORE DETAILED INFORMATION ON FILTER CHOICE, USE, STORING, MAINTENANCE AND DISPOSAL, SEE SCOTT INSTRUCTIONS FOR USE SUPPLIED WITH SCOTT PRODUCTS.

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
www.scottsafety.com • scott.sales.uk@tycoint.com

Scott_AP_PRO2000_Jan11_ENG