

ESPECIFICACIONES TRAJE PROTECCIÓN QUÍMICA SUPERIOR

Material properties

Material weight	680 g/m ²
Colour	Red or Olive green

Mechanical data

EN 943-1/-2	Test method	Result	Class
Abrasion	EN 530	> 2000 cycles	6

Resistance to flame	EN 13274-4, meth 3	> 50 N	3
Seam strength	ISO 5082	5 Sec	3
Limited flame spread index	ISO 5082	> 500 N	6
Antistatic material	EN 14116	No hole	3
Resistance to blocking	EN 1149-5	Pass	N.A.
	ISO 5978	No blocking	2
NFPA 1991			
Tear resistance	ASTM D2582	60 N	N.A.
Burst strength	ASTM D751	1287 N	N.A.
Flamability resistance	ASTM F1358	0 sec/Pass	N.A.
Optional Overall Flash Fire ensemble test	NFPA 1991	Pass	N.A.
Optional Liquefied gas permeation resistance	NFPA 1991	Pass	N.A.

Test methods according to EN 943-1 and -2 and classes according to EN 14325. Except Limited flame spread, Antistatic properties and Blocking, which are voluntary tests. N.A. = not applicable.

Chemical permeation data

Chemical	BT (min)	Chemical	BT (min)
Acetic anhydride	> 480	Isoprene	> 480
*Acetone	> 1440	JP-4	> 480
*Acetonitrile	> 1440	Lewisite (L)	> 1440
Acetyl chloride	> 480	*Methanol	> 1440
Acrylamide 40 %	> 480	*Methyl chloride	> 1440
Acrylic acid	> 480	Methyl ethyl ketone	> 480
*Anhydrous ammonia	> 1440	Methyl isocyanate	> 480
Aniline	> 480	Methyl metacrylate	> 480
Arsine (AS)	> 480	Methyl tert-butyl ether	> 480
Benzene	> 480	Monochlorobenzene	> 480
Bromine	> 240	Mustard gas (HD)	> 1440
*1,3-Butadiene	> 1440	Nitric acid 70 %	> 480

Butylamine	> 240	Nitric acid, fuming	> 120 ¹
*Carbon disulphide 95 %	> 1440	*Nitrobenzene	> 1440
*Chlorine	> 1440	Nitromethane	> 480
Chloroform	> 480	Oleum 30 %	> 480
Chlorosulfonic acid	> 480	Phenol 85 %	> 480
Cyanogen chloride (CK)	> 60 ²	Phosgene (Carbonyl chloride, CG)	> 480
*Dichloromethane	> 1440	Phosphoric acid 85 %	> 480
*Diethyl amine	> 480 ¹	Phosphorous trichloride	> 480
Diethyl ether	> 240	Pyridine	> 480
*Dimethyl formamide	> 1440	Sarin (GB)	> 1440
Dimethyl hydrazine 98 %	> 480	*Sodium hydroxide 40 %	> 1440
Dimethylsulfate (DMA)	> 60 ²	Soman (GD)	> 1440
Dimethylsulfoxide	> 480	Styrene	> 480
Epichlorohydrin	> 480	*Sulphuric acid 98 %	> 1440
*Ethyl acetate	> 1440	Sulfur dioxide	> 480
Ethylene glycol	> 480	Tabun (GA)	> 1440
*Ethylene oxide	> 1440	*Tetrachloroethylene	> 1440
Formaldehyde 37 %	> 480	*Tetrahydrofuran	> 1440
Formic acid 96 %	> 480	Thionyl chloride 97 %	> 480
Furfural	> 480	*Toluene	> 1440
Heptane	> 480	Toluene diisocyanate (TDI) 96%	> 480
*Hexane	> 1440	Tribromophenol	> 480
Hydrazine	> 480	Trichloroacetic acid	> 480
Hydrochloric acid 37 %	> 480	Trichloroethylene	> 480
Hydrofluoric acid 48 %	> 480	Triethylamine	> 480
*Hydrogen chloride	> 1440	Triethylenetetramine	> 480
Hydrogen cyanide (AC, HCN)	> 60 ²	Vinyl acetate	> 480
Hydrogen fluoride, gas	> 480	Vinyl chloride	> 480
Hydrogen fluoride, liquified	> 240	VX	> 1440
Hydrogen peroxide 50 %	> 480		

Comments:

All permeation tests are performed in accordance with ASTM F739, breakthrough criterion 0,1 g/cm²/min and test duration 8 hours except chemical marked:

- (1) which are tested according to EN 374, breakthrough criterion 1 g/cm²/min, test duration 8 hours
- (2) which are tested in accordance with ASTM F739, breakthrough criterion 0,1 g/cm²/min, test duration 1 hour and the chemical warfare agents HD, L, GA, GB, GD and VX, which are tested according to FINABELConv. 0.7.C at 37 °C and test duration 24 hours

All chemicals are tested at 99 – 100 % concentration unless otherwise stated.

Chemicals marked * are stipulated in NFPA 1991 and those underlined are stipulated in EN 943-2.

BT = breakthrough time