

COMMERCIAL / PUBLIC SAFETY



Permeation Results of Seam/Material on Whites HazMat

Chemical	Solubility In Water	Concentration	Specific Wt.	Break Through Time / Minutes
Acetone	100	100%	0.79	13
Acetonitrile	100	100%	0.78	90
Ammonia Solution	100	10%	NA	> 480
Carbon Disulfide	0.2	98%	1.26	0
Diethylamine	82	100%	0.71	45
Dimethylformamide	100	100%	0.95	80
Dichloromethane	1.3	100%	1.34	4
Ethyl Acetate	8.7	100%	0.90	> 480
Hexane	0.014	100%	0.66	> 480
Isopropanol	100	100%	0.78	> 480
Methanol	100	100%	0.79	> 480
Nitrobenzene	Not Soluble	100%	1.19	120
Tetrachloroethylene	0.015	100%	1.62	47
Tetrahydrofuran	100	100%	0.89	13
Toluene	0.05	100%	0.87	22
Sulfuric Acid	100	50%	1.83	> 480
Sodium Hydroxide	50	50%	2.13	> 480
ISO Liquid B (isooctane/toluene)	Not Soluble	70%/30%	≤1	51
ISO Liquid C (isooctane/toluene)	Not Soluble	50%/50%	≤1	61
ISO Liquid F	Not Soluble	80%/20%	≤1	190
ASTM Oil#1 (JP8)	Not Soluble	Neat	≤1	> 480

Liquid B is a liquid to simulate low octane gasoline
 Liquid C is a liquid to simulate high-octane gasoline
 Liquid F is a liquid to simulate diesel fuel and #2 heating oil

Breakthrough detection time criteria is 1.0 µg/cm²/min

All tests were performed in accordance with ASTM F739-07, Standard Test Method for Resistance of Protective Clothing Materials to Permeation by Liquids or Gases Under Conditions of Continuous Contact

The material samples tested were in pristine condition in a laboratory environment @ 23°C / 73°F