



## Fabric Permeation Data



CHEMICAL	PHYSICAL STATE	CAS NO.	BREAKTHROUGH TIME	CLASS	BREAKTHROUGH TIME	CLASS
Acetic Acid (>95%)	Liquid	64-19-7	12 mins	Class 1		
Acetone	Liquid	67-64-1	Imm.	--	> 480 mins	Class 6
Acetonitrile	Liquid	75-05-08	Imm.	--	> 480 mins	Class 6
Ammonia (30%)	Liquid	7664-41-1	14 mins	Class 1		
Ammonium Hydroxide (28%)	Liquid	1336-21-6	28 mins	Class 1		
Benzene	Liquid	71-43-2	Imm.	--		
Carbon Disulphide	Liquid	75-15-0	Imm.	--	> 480 mins	Class 6
Chromic Acid (80%)	Liquid	7738-94-5	> 480 mins	Class 6		
Dichloromethane	Liquid	75-09-02	Imm.	--	> 480 mins	Class 6
Diesel Fuel	Liquid	----	7 mins	--		
Diethylamine	Liquid	109-89-7	Imm.	--	> 10 mins	Class 1
Ethyl Acetate	Liquid	141-78-6	Imm.	--	> 480 mins	Class 6
Formaldehyde (10%)	Liquid	50-00-0	135 mins	Class 4		
Formic Acid (85%)	Liquid	64-18-6	> 480 mins	Class 6		
Hydrochloric Acid (37%)	Liquid	7647-01-0	15 mins	Class 1		
Hydrofluoric Acid (48%)	Liquid	7664-39-3			> 480 mins	Class 6
Hydrogen Peroxide (30%)	Liquid	7722-84-1	> 480 mins	Class 6		
Isopropyl Alcohol (70%)	Liquid	67-63-0	> 480 mins	Class 6		
Mercury(II) Chloride (sat)	Liquid	7487-94-7	> 480 mins	Class 6		
Methanol	Liquid	67-56-1	Imm.	--	> 480 mins	Class 6
Methyl Ethyl Ketone	Liquid	78-93-3	Imm.	--		
Methylamine (40%)	Liquid	74-89-5	19 mins	Class 1		
Methylhydrazine	Liquid	60-34-4	2 mins	--		
N,N-Dimethyl Formamide	Liquid	68-12-2	> 480 mins	Class 6	> 480 mins	Class 6
n-Hexane	Liquid	110-54-3	Imm.	--	> 480 mins	Class 6
Nitric Acid (65%)	Liquid	7697-37-2	273 mins	Class 5		
Nitrobenzene	Liquid	98-95-3	Imm.	--	> 480 mins	Class 6
Nitromethane	Liquid	75-52-5	Imm.	--		
Perchloric Acid (70%)	Liquid	7601-90-3	> 480 mins	Class 6		
Potassium Chromate (sat,5%)	Liquid	7789-00-6	> 480 mins	Class 6		
Potassium Hydroxide (50%)	Liquid	1310-58-3	> 480 mins	Class 6		
Sodium Cyanide(10%)	Liquid	143-33-9	> 480 mins	Class 6		
Sodium Hydroxide (40%)	Liquid	1310-73-2	> 480 mins	Class 6		
Sodium Hydroxide (50%)	Liquid	1310-73-2			> 480 mins	Class 6
Sodium Hypochlorite (10-13%)	Liquid	7681-52-9	> 480 mins	Class 6		
Sulfuric Acid (98%)	Liquid	7664-93-9	> 480 mins	Class 6	> 480 mins	Class 6
Tetrachloroethylene	Liquid	127-18-4	Imm.	--	> 480 mins	Class 6
Tetrahydrofuran	Liquid	109-99-9	Imm.	--	> 40 mins	Class 2
Toluene	Liquid	108-88-3	Imm.	--	>20 mins	Class 1
Unleaded Gasoline	Liquid	----	Imm.	--		

Breakthrough time comes from the laboratory test result. Safe wearing time may be longer or shorter depending on some other conditions, including toxicity, exposure situations, and concentration of the substance. The user shall be responsible for determining how long the garment can be worn.

Although permeation test proves fabric of CAT.III Type 3 protective clothing serves as barrier to certain chemicals in gas phase, it is NOT categorized as gas-tight suit.

