

# Mapa Chemical

## Solo 997

Chemical Product	CAS #	Breakthrough time (minutes)	Permeation level	Standard	Degradatio level	Rating
2-Propanol (Isopropanol) 70%	67-63-0	95	3	EN 16523-1:2015	NT	
2-Propanol (Isopropanol) 99%	67-63-0	30	1	ASTM F739	3	=
Acetic acid 50%	64-19-7	34	2	ASTM F739	2	=
Acetic acid 99%	64-19-7	4	0	ASTM F739	NT	
Acetone 99%	67-64-1	1	0	ASTM F739	1	-
Acetonitrile 99%	75-05-8	1	0	ASTM F739	NT	
Ammonium hydroxide solution 29%	1336-21-6	13	1	ASTM F739	4	+
Amyl Alcohol 99%	71-41-0	69	3	ASTM F739	NT	
Carbon Tetrachloride 99%	56-23-5	3	0	ASTM F739	NT	
Dichloromethane (Methylene Chloride) 99%	75-09-2	0	0	ASTM F739	1	-
Diethylamine 98%	109-89-7	1	0	ASTM F739	NT	
Dimethylsulfoxide 99%	67-68-5	21	1	ASTM F739	NT	
Ethanol 70%	64-17-5	22	1	EN 374-3:2003	NT	
Ethanol 95%	64-17-5	11	1	ASTM F739	NT	
Formaldehyde 37%	50-00-0	NT	NT		4	
Formic Acid 96%	64-18-6	3	0	ASTM F739	NT	
Hydrochloric acid 10%	7647-01-0	NT	NT		4	
Hydrochloric acid 35%	7647-01-0	53	2	EN 374-3:2003	4	+
Hydrochloric acid 37%	7647-01-0	60	2	ASTM F739	4	+
Hydrofluoric Acid 10%	7664-39-3	NT	NT		4	
Hydrofluoric Acid 49%	7664-39-3	10	0	ASTM F739	4	=
Hydrogen peroxide 30%	7722-84-1	480	6	ASTM F739	2	+
Methanol 99%	67-56-1	4	0	ASTM F739	3	=
n-Butanol 99%	71-36-3	41	2	ASTM F739	NT	
n-Heptane 99%	142-82-5	62	3	EN 16523-1:2015	2	+
Naphtha Heavy mixture	68551-17-7	107	3	ASTM F739	4	++
Naphtha VM&P mixture	8032-32-4	27	1	ASTM F739	NT	
Nitric acid 50%	7697-37-2	27	1	ASTM F739	1	-
p-dioxane (1,4-Dioxane) 99%	123-91-1	2	0	ASTM F739	NT	
Phenol 50%	108-95-2	3	0	ASTM F739	NT	
Phenol 85%	108-95-2	NT	NT		1	

\*not normalized result

### **Overall Chemical Protection Rating**

Protection rating is determined by taking into account the effects of both permeation and degradation in an attempt to provide users with an overall protection guideline when using our glove products against specific chemicals.

Used for high chemical exposure or chemical immersion, limited to breakthrough time based on a working day.
Used for repeated chemical contact, limited to total chemical exposure i.e. : accumulative breakthrough time based on a

working day. **Splash protection only**, on chemical exposure the gloves should be discarded and new gloves worn as soon as possible.

**Not recommended**, these gloves are deemed unsuitable for work with this chemical.

NT : Not tested

NA : Not applicable because not fully tested (only degradation OR permeation results)

The chemical test data and overall chemical protection rating should not be used as the absolute basis for glove selection. Actual in-use conditions may vary glove performance from the controlled conditions of laboratory tests. Factors other than chemical contact time



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Phosphoric acid 75%	7664-38-2	480	6	ASTM F739	4	++
Phosphoric acid 85%	7664-38-2	480	6	ASTM F739	4	++
Sodium hydroxide 20%	1310-73-2	480	6	ASTM F739	4	++
Sodium hydroxide 40%	1310-73-2	480	6	ASTM F739	2	+
Sodium hydroxide 50%	1310-73-2	480	6	ASTM F739	4	++
Sodium Hypochlorite 5%	10022-70-5	480	6	ASTM F739	NT	
Sulfuric acid 10%	7664-93-9	480	6	ASTM F739	4	++
Sulfuric acid 40%	7664-93-9	480	6	ASTM F739	4	++
Sulfuric acid 50%	7664-93-9	480	6	ASTM F739	4	++
Toluene 99%	108-88-3	1	0	ASTM F739	1	-
Unleaded gasoline mixture	8006-61-9	4	0	ASTM F739	NT	
Xylene 99%	1330-20-7	2	0	ASTM F739	1	-

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