Mapa Chemical

Vital 124

Chemical Product	CAS #	Breakthrough time (minutes)	Permeation level	Standard	Degradation level	Rating
2-Butoxyethanol (Butyl Cellusolve) 99%	111-76-2	21	1	ASTM F739	4	+
2-Ethoxyethanol (Cellosolve) 99%	110-80-5	27	1	ASTM F739	4	+
2-Ethoxyethyl acetate (Cellosolve Acetate) 99%	111-15-9	15	1	ASTM F739	3	=
2-Propanol (Isopropanol) 99%	67-63-0	15	1	EN 374-3:2003	4	+
Acetaldehyde 99%	75-07-0	5	0	ASTM F739	4	=
Acetic acid 50%	64-19-7	254	5	ASTM F739	4	++
Acetic acid 99%	64-19-7	8	0	EN 374-3:2003	4	=
Acetone 99%	67-64-1	7	0	ASTM F739	3	=
Ammonium hydroxide solution 29%	1336-21-6	16	1	ASTM F739	4	+
Aniline 99%	62-53-3	67	3	ASTM F739	4	++
Dimethylformamide 99%	68-12-2	12	1	EN 374-3:2003	4	+
Dimethylsulfoxide 99%	67-68-5	216	4	ASTM F739	4	++
Ethanol 95%	64-17-5	14	1	EN 374-3:2003	4	+
Ethylene glycol 99%	107-21-1	>480	6	ASTM F739	4	++
Formaldehyde 37%	50-00-0	>480	6	EN 16523-1:2015	4	++
Hydrazine 70%	302-01-2	115	3	ASTM F739	4	++
Hydrochloric acid 10%	7647-01-0	>480	6	EN 374-3:2003	4	++
Hydrochloric acid 35%	7647-01-0	>480	6	EN 374-3:2003	4	++
Hydrochloric acid 37%	7647-01-0	43	2	ASTM F739	4	+
Hydrogen peroxide 30%	7722-84-1	>480	6	EN 16523-1:2015	4	++
m-Cresol 97%	108-39-4	145	4	ASTM F739	4	++
Methanol 99%	67-56-1	7	0	EN 374-3:2003	4	=
Methyl Ethyl Ketone (2-Butanone) 99%	78-93-3	2	0	EN 374-3:2003	2	-
N-methyl-2-Pyrrolidone 99%	872-50-4	17	1	EN 374-3:2003	4	+
N-N dimethyl acetamide 99%	127-19-5	39	2	ASTM F739	4	+

*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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Mapa Chemical

Vital 124

Chemical Product	CAS #	Breakthrough time (minutes)	Permeation level	Standard	Degradation level	Rating
Nitric acid 10%	7697-37-2	>480	6	ASTM F739	4	++
Nitric acid 20%	7697-37-2	480	6	EN 16523-1:2015	4	++
Nitric acid 40%	7697-37-2	>480	6	ASTM F739	4	++
Nitric acid 50%	7697-37-2	>480	6	ASTM F739	4	++
Nitric acid 65%	7697-37-2	97	3	EN 16523-1:2015	NT	NA
Phenol 85%	108-95-2	77	3	ASTM F739	4	++
Phosphoric acid 75%	7664-38-2	>480	6	ASTM F739	4	++
Phosphoric acid 85%	7664-38-2	>480	6	ASTM F739	4	++
Potassium Hydroxide 50%	1310-58-3	>480	6	ASTM F739	4	++
Skydrol LD-4 mixture	NA	60	2	ASTM F739	NT	NA
Sodium hydroxide 20%	1310-73-2	>480	6	EN 374-3:2003	4	++
Sodium hydroxide 40%	1310-73-2	>480	6	EN 16523-1:2015	4	++
Sodium hydroxide 50%	1310-73-2	>480	6	ASTM F739	4	++
Styrene 99%	100-42-5	1	0	EN 374-3:2003	NT	NA
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	EN 16523-1:2015	4	++
Toluene Diisocyanate (TDI) 80%	584-84-9	>480	6	ASTM F739	3	++
Triethanolamine 98%	102-71-6	>480	6	ASTM F739	4	++

*not normalized result

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