



AdvanTech 519

Chemical Product	CAS #	Breakthrough time (minutes)	Permeation level	Standard	Degradation level	Rating
1,1,1-Trichloroethane 99%	71-55-6	52	2	ASTM F739	NT	NA
1,1,1,2-Tetrachloroethane 98%	79-34-5	12	1	ASTM F739	NT	NA
1,3 - Dichlorobenzene 98%	541-73-1	19	1	ASTM F739	NT	NA
1,3 Ethoxy propionate (Ethyl 3-ethoxypropionate) 99%	763-69-9	76	3	ASTM F739	NT	NA
2-Butoxyethanol (Butyl Cellusolve) 99%	111-76-2	250	5	ASTM F739	NT	NA
2-Ethoxyethanol (Cellosolve) 99%	110-80-5	216	4	ASTM F739	NT	NA
2-Ethoxyethyl acetate (Cellosolve Acetate) 99%	111-15-9	75	3	ASTM F739	NT	NA
2-Propanol (Isopropanol) 99%	67-63-0	480	6	ASTM F739	4	++
2-Propanol (Isopropanol) 99%	67-63-0	358	5	EN 374-3:2003	4	++
2-Pyrrolidine 99%	123-75-1	21	1	ASTM F739	NT	NA
2,2,2-Trifluoroethanol 99%	75-89-8	11	1	ASTM F739	NT	NA
Acetic acid 10%	64-19-7	480	6	ASTM F739	NT	NA
Acetic acid 50%	64-19-7	480	6	ASTM F739	NT	NA
Acetic acid 99%	64-19-7	43	2	ASTM F739	NT	NA
Acetone 99%	67-64-1	4	0	ASTM F739	NT	NA
Ammonium hydroxide solution 25%	1336-21-6	63	3	EN 16523-1:2015	4	++
Ammonium hydroxide solution 29%	1336-21-6	440	5	ASTM F739	NT	NA
Aniline 99%	62-53-3	30	1	ASTM F739	NT	NA
Bioact 115 mixture	NA	123	4	ASTM F739	NT	NA
Butyl Acetate 99%	123-86-4	44	2	ASTM F739	1	-
Butyl Acetate 99%	123-86-4	12	1	EN 374-3:2003	1	-
Carbon Tetrachloride 99%	56-23-5	243	5	ASTM F739	NT	NA
Chromic Acid 50%	7738-94-5	261	5	ASTM F739	NT	NA
Cumene 98%	98-82-8	189	4	ASTM F739	NT	NA
Cyclohexane 99%	110-82-7	480	6	ASTM F739	NT	NA

*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

AdvanTech 519

Chemical Product	CAS #	Breakthrough time (minutes)	Permeation level	Standard	Degradation level	Rating
Cyclopentanone 99%	120-92-3	6	0	ASTM F739	NT	NA
Diethanolamine 97%	111-42-2	480	6	ASTM F739	NT	NA
Dimethylsulfoxide 99%	67-68-5	53	2	ASTM F739	NT	NA
Ethanol 95%	64-17-5	92	3	ASTM F739	NT	NA
Ether (Diethyl Ether) 99%	60-29-7	20	1	ASTM F739	NT	NA
Ethyl L -(-)- lactate 98%	687-47-8	152	4	ASTM F739	NT	NA
Ethylene glycol 99%	107-21-1	480	6	ASTM F739	NT	NA
Formaldehyde 37%	50-00-0	480	6	ASTM F739	4	++
Formaldehyde 37%	50-00-0	480	6	EN 16523-1:2015	4	++
Furfural 99%	98-01-1	17	1	ASTM F739	NT	NA
Hexamethyldisilazane (HMDS) 98%	999-97-3	480	6	ASTM F739	NT	NA
Hydrazine 35%	302-01-2	480	6	ASTM F739	NT	NA
Hydrazine 70%	302-01-2	480	6	ASTM F739	NT	NA
Hydrochloric acid 10%	7647-01-0	480	6	ASTM F739	NT	NA
Hydrochloric acid 10%	7647-01-0	480	6	EN 374-3:2003	NT	NA
Hydrochloric acid 35%	7647-01-0	480	6	EN 374-3:2003	NT	NA
Hydrochloric acid 37%	7647-01-0	480	6	ASTM F739	NT	NA
Hydrofluoric Acid 49%	7664-39-3	200	4	ASTM F739	NT	NA
Hydrogen peroxide 30%	7722-84-1	480	6	EN 16523-1:2015	NT	NA
Isobutyl alcohol 99%	78-83-1	480	6	ASTM F739	NT	NA
Kerosene mixture	8008-20-6	480	6	ASTM F739	NT	NA
m-Cresol 97%	108-39-4	130	4	ASTM F739	NT	NA
Methanol 99%	67-56-1	30	1	ASTM F739	1	-
Methanol 99%	67-56-1	12	1	EN 374-3:2003	1	-
Methyl-3-methoxypropionate 100%	3852-09-3	28	1	ASTM F739	NT	NA
Methylisobutylketone 99%	108-10-1	18	1	ASTM F739	NT	NA

*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

AdvanTech 519

Chemical Product	CAS #	Breakthrough time (minutes)	Permeation level	Standard	Degradation level	Rating
n-Heptane 99%	142-82-5	480	6	ASTM F739	4	++
n-Heptane 99%	142-82-5	480	6	EN 374-3:2003	4	++
n-hexane 95%	110-54-3	480	6	ASTM F739	NT	NA
N-methyl-2-Pyrrolidone 99%	872-50-4	21	1	ASTM F739	NT	NA
Naphtha mixture	8030-30-6	480	6	ASTM F739	NT	NA
Naphtha VM&P mixture	8032-32-4	480	6	ASTM F739	NT	NA
Nitric acid 70%	7697-37-2	14	1	ASTM F739	NT	NA
Nitrobenzene 99%	98-95-3	17	1	ASTM F739	NT	NA
Nitrohydrochloric acid (Aqua Regia) mixture	8007-56-5	480	6	ASTM F739	NT	NA
Oleum (free SO3) 67%	8014-95-7	358	5	ASTM F739	NT	NA
Phenol 85%	108-95-2	111	3	ASTM F739	NT	NA
Phosphoric acid 75%	7664-38-2	480	6	ASTM F739	NT	NA
Phosphoric acid 85%	7664-38-2	480	6	ASTM F739	NT	NA
Polychlorinated Biphenyl (PCB) (50%) in 1,2,4-Trichlorobenzene mixture	11097-69-1	180	4	ASTM F739	NT	NA
Potassium Hydroxide 50%	1310-58-3	480	6	ASTM F739	NT	NA
Propylene Glycol Methyl Ethyl Acetate (PGMEA) 99%	108-65-6	103	3	ASTM F739	NT	NA
Propylene Glycol Monomethyl Ether 99%	107-98-2	111	3	ASTM F739	NT	NA
Sodium hydroxide 20%	1310-73-2	480	6	ASTM F739	4	++
Sodium hydroxide 20%	1310-73-2	480	6	EN 374-3:2003	4	++
Sodium hydroxide 40%	1310-73-2	480	6	ASTM F739	NT	NA
Sodium hydroxide 40%	1310-73-2	480	6	EN 374-3:2003	NT	NA
Sodium hydroxide 50%	1310-73-2	480	6	ASTM F739	NT	NA
Sodium hydroxide 50%	1310-73-2	480	6	EN 374-3:2003	NT	NA
Styrene 99%	100-42-5	5	0	EN 374-3:2003	NT	NA

*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

AdvanTech 519

Chemical Product	CAS #	Breakthrough time (minutes)	Permeation level	Standard	Degradation level	Rating
Sulfuric acid 10%	7664-93-9	480	6	EN 374-3:2003	4	++
Sulfuric acid 40%	7664-93-9	480	6	EN 374-3:2003	4	++
Sulfuric acid 96%	7664-93-9	110	3	ASTM F739	NT	NA
Sulfuric acid 96%	7664-93-9	11	1	EN 374-3:2003	NT	NA
Tert. Amyl Methyl Ether 96%	994-05-8	480	6	ASTM F739	NT	NA
Tetrachloroethylene (Perchloroethylene) 99%	127-18-4	480	6	ASTM F739	2	+
Tetrachloroethylene (Perchloroethylene) 99%	127-18-4	42	2	EN 374-3:2003	2	=
Tetraethyl Orthosilicate 100%	78-10-4	480	6	ASTM F739	NT	NA
Tetramethyl Ammonium Hydroxide 25%	75-59-2	720	6	ASTM F739	NT	NA
Toluene 99%	108-88-3	10	0	ASTM F739	1	-
Toluene 99%	108-88-3	6	0	EN 374-3:2003	1	-
Triethanolamine 98%	102-71-6	480	6	ASTM F739	NT	NA
Trimethylphosphite 97%	121-45-9	24	1	ASTM F739	NT	NA
Turpentine mixture	8006-64-2	480	6	ASTM F739	NT	NA
Unleaded gasoline mixture	8006-61-9	480	6	ASTM F739	NT	NA
Xylene 99%	1330-20-7	38	2	ASTM F739	1	-
Xylene 99%	1330-20-7	11	1	EN 374-3:2003	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