

Ultranitril 480

Chemical Product	CAS #	Breakthrough time (minutes)	Permeation level	Standard	Degradation level	Rating
1,1,1-Trichloroethane 99%	71-55-6	276	5	ASTM F739	1	-
1,1,2-Trichlorotrifluoroethane (Freon TF or Freon 113) 99%	76-13-1	>480	6	ASTM F739	4	++
1,1,2,2-Tetrachloroethane 98%	79-34-5	59	2	ASTM F739	1	-
1,2 - dichloroethane 99%	107-06-2	18	1	ASTM F739	1	-
1,3 - Dichlorobenzene 98%	541-73-1	73	3	ASTM F739	1	-
2-Butoxyethanol (Butyl Cellusolve) 99%	111-76-2	>480	6	ASTM F739	4	++
2-Ethoxyethanol (Cellosolve) 99%	110-80-5	416	5	ASTM F739	4	++
2-Ethoxyethyl acetate (Cellosolve Acetate) 99%	111-15-9	162	4	ASTM F739	3	++
2-Propanol (Isopropanol) 99%	67-63-0	>480	6	EN 374-3:2003	4	++
2,2,2-Trifluoroethanol 99%	75-89-8	43	2	ASTM F739	1	-
Acetic acid 10%	64-19-7	>480	6	ASTM F739	4	++
Acetic acid 50%	64-19-7	>480	6	ASTM F739	4	++
Acetic acid 99%	64-19-7	118	3	ASTM F739	NT	NA
Acrylonitrile 99%	107-13-1	12	1	ASTM F739	1	-
Ammonium hydroxide solution 25%	1336-21-6	>480	6	EN 16523-1:2015	4	++
Ammonium hydroxide solution 29%	1336-21-6	>480	6	ASTM F739	4	++
Aniline 99%	62-53-3	72	3	ASTM F739	1	-
Benzene 99%	71-43-2	27	1	ASTM F739	1	-
Butyl Acetate 99%	123-86-4	78	3	EN 374-3:2003	1	-
Carbon disulfide 99%	75-15-0	20	1	EN 16523-1:2015	2	=
Carbon Tetrachloride 99%	56-23-5	341	5	ASTM F739	3	++
Chlorobenzene 99%	108-90-7	42	2	ASTM F739	NT	NA
Chromic Acid 50%	7738-94-5	>175	4	ASTM F739	4	++
Cumene 98%	98-82-8	271	5	ASTM F739	3	++
Cyclohexane 99%	110-82-7	>480	6	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

Ultranitril 480

Chemical Product	CAS #	Breakthrough time (minutes)	Permeation level	Standard	Degradation level	Rating
Diethanolamine 97%	111-42-2	>480	6	ASTM F739	4	++
Diethylamine 98%	109-89-7	53	2	EN 16523-1:2015	1	-
Dimethylformamide 99%	68-12-2	35	2	ASTM F739	NT	NA
Dimethylsulfoxide 99%	67-68-5	>480	6	ASTM F739	3	++
Epichlorohydrin 99%	106-89-8	4	0	ASTM F739	NT	NA
Ethanol 95%	64-17-5	>480	6	ASTM F739	4	++
Ether (Diethyl Ether) 99%	60-29-7	64	3	ASTM F739	4	++
Ethyl acetate 99%	141-78-6	27	1	EN 16523-1:2015	NT	NA
Ethylene glycol 99%	107-21-1	>480	6	ASTM F739	4	++
Ethylene oxide 100%	75-21-8	32	2	ASTM F739	NT	NA
Formaldehyde 37%	50-00-0	>480	6	EN 16523-1:2015	4	++
Freon 12 99%	75-71-8	>480	6	ASTM F739	NT	NA
Fuel oils mixture	68476-34-6	>480	6	ASTM F739	NT	NA
Furfural 99%	98-01-1	61	3	ASTM F739	NT	NA
Hydrazine 35%	302-01-2	>480	6	ASTM F739	4	++
Hydrazine 70%	302-01-2	>480	6	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	>480	6	ASTM F739	4	++
Hydrofluoric Acid 49%	7664-39-3	134	4	ASTM F739	4	++
Hydrogen peroxide 30%	7722-84-1	>480	6	EN 16523-1:2015	4	++
Isobutyl alcohol 99%	78-83-1	>480	6	ASTM F739	4	++
Kerosene mixture	8008-20-6	>480	6	ASTM F739	4	++
m-Cresol 97%	108-39-4	210	4	ASTM F739	2	+
Methanol 99%	67-56-1	122	4	EN 16523-1:2015	3	++
Methylisobutylketone 99%	108-10-1	57	2	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

Ultranitril 480


Chemical Product	CAS #	Breakthrough time (minutes)	Permeation level	Standard	Degradation level	Rating
n-Heptane 99%	142-82-5	>480	6	EN 16523-1:2015	4	++
n-hexane 95%	110-54-3	>480	6	ASTM F739	4	++
N-methyl-2-Pyrrolidone 99%	872-50-4	108	3	ASTM F739	NT	NA
N-N dimethyl acetamide 30%	127-19-5	>480	6	ASTM F739	NT	NA
N-N dimethyl acetamide 99%	127-19-5	39	2	ASTM F739	1	-
Naphtha mixture	8030-30-6	>480	6	ASTM F739	4	++
Naphtha (Stoddart Solvent) mixture	8052-41-3	>480	6	ASTM F739	4	++
Naphtha VM&P mixture	8032-32-4	>480	6	ASTM F739	4	++
Nitric acid 50%	7697-37-2	341	5	ASTM F739	3	++
Nitric acid 70%	7697-37-2	49	2	ASTM F739	NT	NA
Nitrobenzene 99%	98-95-3	45	2	ASTM F739	1	-
Phenol 85%	108-95-2	255	5	ASTM F739	3	++
Phosphoric acid 75%	7664-38-2	>480	6	ASTM F739	4	++
Phosphoric acid 85%	7664-38-2	>480	6	ASTM F739	4	++
Polychlorinated Biphenyl (PCB) (50%) in 1,2,4-Trichlorobenzene mixture	11097-69-1	343	5	ASTM F739	NT	NA
Potassium Hydroxide 50%	1310-58-3	>480	6	ASTM F739	4	++
Pyridine 99%	110-86-1	26	1	ASTM F739	1	-
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	EN 374-3:2003	4	++
Styrene 99%	100-42-5	36	2	EN 16523-1:2015	1	-
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	++
Sulfuric acid 96%	7664-93-9	243	5	EN 16523-1:2015	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

Ultranitril 480


Chemical Product	CAS #	Breakthrough time (minutes)	Permeation level	Standard	Degradation level	Rating
t-Butyl Methyl Ether 98%	1634-04-4	>480	6	ASTM F739	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	4	++
Tetrahydrofurane 99%	109-99-9	17	1	ASTM F739	1	-
Toluene 99%	108-88-3	51	2	EN 16523-1:2015	1	-
Toluene Diisocyanate (TDI) 80%	584-84-9	>480	6	ASTM F739	2	+
Trichloroethylene 99%	79-01-6	9	0	ASTM F739	1	-
Triethanolamine 98%	102-71-6	>480	6	ASTM F739	4	++
Turpentine mixture	8006-64-2	>480	6	ASTM F739	4	++
Unleaded gasoline mixture	8006-61-9	>480	6	ASTM F739	4	++
Vinyl acetate 99%	108-05-4	30	1	ASTM F739	2	=
Xylene 99%	1330-20-7	92	3	ASTM F739	2	+


*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