

# Chemical Compatibility Guide for: MAPA® STANSOLV® AF-15 Nitrile Gloves

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## StanSolv AF-15

Chemical Product	CAS #	BTT (minutes)	Permeation level	Standard	Degradatio level	Rating
Carbon disulfide 99%	75-15-0	4	0	ASTM F739	NT	NA
Diethylamine 98%	109-89-7	16	1	ASTM F739	NT	NA
Dimethylformamide 99%	68-12-2	11	1	ASTM F739	1	-
Methanol 85%	67-56-1	NT	NT		4	NA
Methanol 99%	67-56-1	24	1	ASTM F739	4	+
n-Heptane 99%	142-82-5	480	6	EN 374-3:2003	NT	NA
n-hexane 95%	110-54-3	480	6	ASTM F739	4	++
Nitrobenzene 99%	98-95-3	20	1	ASTM F739	NT	NA
Sodium hydroxide 20%	1310-73-2	480	6	ASTM F739	4	++
Sodium hydroxide 40%	1310-73-2	480	6	ASTM F739	4	++
Sodium hydroxide 50%	1310-73-2	480	6	ASTM F739	4	++
Sulfuric acid 96%	7664-93-9	60	2	ASTM F739	1	-
Tetrachloroethylene (Perchloroethylene) 99%	127-18-4	52	2	ASTM F739	NT	NA
Tetrahydrofurane 99%	109-99-9	4	0	ASTM F739	NT	NA
Toluene 99%	108-88-3	9	0	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 BTT based on a working day.
- Used for **repeated chemical contact**, limited to total chemical exposure i.e. : accumulative BTT 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

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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, such as concentration and temperature, glove thickness and glove reuse, may also affect performance. Other glove requirements, such as length, dexterity, cut, abrasion, puncture and snag resistance, or glove grip also need to be considered in making your final selection.

## StanSolv A-15

Chemical Product	CAS #	BTT (minutes)	Permeation level	Standard	Degradatio level	Rating
1,1,1-Trichloroethane 99%	71-55-6	75	3	ASTM F739	1	-
2-Butoxyethanol (Butyl Cellusolve) 99%	111-76-2	480	6	ASTM F739	4	++
2-Ethoxyethanol (Cellosolve) 99%	110-80-5	224	4	ASTM F739	NT	NA
2-Ethoxyethyl acetate (Cellosolve Acetate) 99%	111-15-9	138	4	ASTM F739	NT	NA
2-Propanol (Isopropanol) 99%	67-63-0	480	6	EN 374-3:2003	4	++
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	93	3	ASTM F739	NT	NA
Butyl Acetate 99%	123-86-4	55	2	ASTM F739	4	+
Cumene 98%	98-82-8	191	4	ASTM F739	NT	NA
Cyclohexane 99%	110-82-7	480	6	ASTM F739	NT	NA
Diethylamine 98%	109-89-7	16	1	ASTM F739	3	=
Dimethylformamide 99%	68-12-2	15	1	ASTM F739	1	-
Formaldehyde 30%	50-00-0	NT	NT		3	NA
Formaldehyde 37%	50-00-0	480	6	ASTM F739	4	++
Isobutyl alcohol 99%	78-83-1	480	6	ASTM F739	4	++
Isophorone diisocyanate 98%	4098-71-9	480	6	ASTM F739	NT	NA
Kerosene mixture	8008-20-6	480	6	ASTM F739	4	++
m-Cresol 97%	108-39-4	224	4	ASTM F739	NT	NA
Methanol 85%	67-56-1	NT	NT		4	NA
Methanol 99%	67-56-1	50	2	ASTM F739	4	+
n-Heptane 99%	142-82-5	480	6	ASTM F739	NT	NA
N-methyl-2-Pyrrolidone 99%	872-50-4	18	1	EN 374-3:2003	1	-
Naphtha mixture	8030-30-6	480	6	ASTM F739	4	++
Naphtha VM&P mixture	8032-32-4	480	6	ASTM F739	NT	NA
Nitric acid 50%	7697-37-2	277	5	ASTM F739	3	++

\*not normalized result

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Chemical Product	CAS #	BTT (minutes)	Permeation level	Standard	Degradatio level	Rating
Phosphoric acid 75%	7664-38-2	480	6	ASTM F739	NT	NA
Phosphoric acid 85%	7664-38-2	480	6	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 374-3:2003	NT	NA
Sodium hydroxide 50%	1310-73-2	480	6	EN 374-3:2003	NT	NA
Sulfuric acid 96%	7664-93-9	34	2	EN 374-3:2003	NT	NA
t-Butyl Methyl Ether 98%	1634-04-4	238	4	ASTM F739	4	++
Tert. Amyl Methyl Ether 96%	994-05-8	480	6	ASTM F739	4	++
Tetrachloroethylene (Perchloroethylene) 99%	127-18-4	260	5	ASTM F739	4	++
Toluene 99%	108-88-3	18	1	ASTM F739	2	=
Trichloroethylene 99%	79-01-6	12	1	ASTM F739	NT	NA
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	++
Xylene 99%	1330-20-7	32	2	EN 374-3:2003	1	-

\*not normalized result

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## Stansolv A-10

Chemical Product	CAS #	BTT (minutes)	Permeation level	Standard	Degradatio level	Rating
1,1,1-Trichloroethane 99%	71-55-6	52	2	ASTM F739	1	-
1,1,2,2-Tetrachloroethane 98%	79-34-5	12	1	ASTM F739	1	-
1,3 - Dichlorobenzene 98%	541-73-1	19	1	ASTM F739	1	-
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	2	+
2-Ethoxyethanol (Cellosolve) 99%	110-80-5	216	4	ASTM F739	3	++
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-Pyrrolidine 99%	123-75-1	21	1	ASTM F739	NT	NA
2,2,2-Trifluoroethanol 99%	75-89-8	11	1	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	43	2	ASTM F739	2	=
Acetone 99%	67-64-1	4	0	ASTM F739	1	-
Ammonium hydroxide solution 29%	1336-21-6	440	5	ASTM F739	4	++
Aniline 99%	62-53-3	30	1	ASTM F739	1	-
Bioact 115 mixture	NA	123	4	ASTM F739	NT	NA
Butyl Acetate 99%	123-86-4	44	2	ASTM F739	2	=
Carbon Tetrachloride 99%	56-23-5	243	5	ASTM F739	3	++
Chromic Acid 50%	7738-94-5	261	5	ASTM F739	4	++
Cumene 98%	98-82-8	189	4	ASTM F739	4	++
Cyclohexane 99%	110-82-7	480	6	ASTM F739	4	++
Cyclopentanone 99%	120-92-3	6	0	ASTM F739	NT	NA
Diethanolamine 97%	111-42-2	480	6	ASTM F739	4	++
Dimethylsulfoxide 99%	67-68-5	53	2	ASTM F739	1	-
Ethanol 95%	64-17-5	92	3	ASTM F739	4	++

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Ether (Diethyl Ether) 99%	60-29-7	20	1	ASTM F739	1	-
Ethyl L -(-)- lactate 98%	687-47-8	152	4	ASTM F739	2	+
Ethylene glycol 99%	107-21-1	480	6	ASTM F739	4	++
Formaldehyde 37%	50-00-0	480	6	ASTM F739	4	++
Furfural 99%	98-01-1	17	1	ASTM F739	1	-
Hexamethyldisilazane (HMDS) 98%	999-97-3	480	6	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	ASTM F739	4	++
Hydrochloric acid 35%	7647-01-0	NT	NT		4	NA
Hydrochloric acid 37%	7647-01-0	480	6	ASTM F739	4	++
Hydrofluoric Acid 49%	7664-39-3	200	4	ASTM F739	3	++
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	130	4	ASTM F739	1	-
Methanol 85%	67-56-1	NT	NT		4	NA
Methanol 99%	67-56-1	30	1	ASTM F739	4	+
Methyl-3-methoxypropionate 100%	3852-09-3	28	1	ASTM F739	1	-
Methylisobutylketone 99%	108-10-1	18	1	ASTM F739	1	-
n-Heptane 99%	142-82-5	480	6	ASTM F739	4	++
n-hexane 95%	110-54-3	480	6	ASTM F739	4	++
N-methyl-2-Pyrrolidone 99%	872-50-4	21	1	ASTM F739	1	-
Naphtha mixture	8030-30-6	480	6	ASTM F739	4	++
Naphtha VM&P mixture	8032-32-4	480	6	ASTM F739	4	++
Nitric acid 70%	7697-37-2	14	1	ASTM F739	NT	NA
Nitrobenzene 99%	98-95-3	17	1	ASTM F739	1	-

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Nitrohydrochloric acid (Aqua Regia) mixture	8007-56-5	480	6	ASTM F739	4	++
Oleum (free SO3) 67%	8014-95-7	358	5	ASTM F739	NT	NA
Phenol 85%	108-95-2	111	3	ASTM F739	1	-
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) mixture	1336-36-3	NT	NT		4	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	4	++
Propylene Glycol Methyl Ethyl Acetate (PGMEA) 99%	108-65-6	103	3	ASTM F739	3	++
Propylene Glycol Monomethyl Ether 99%	107-98-2	111	3	ASTM F739	4	++
Sodium hydroxide 20%	1310-73-2	480	6	ASTM F739	4	++
Sodium hydroxide 40%	1310-73-2	480	6	ASTM F739	4	++
Sodium hydroxide 50%	1310-73-2	480	6	ASTM F739	4	++
Sulfuric acid 96%	7664-93-9	110	3	ASTM F739	1	-
Tert. Amyl Methyl Ether 96%	994-05-8	480	6	ASTM F739	4	++
Tetrachloroethylene (Perchloroethylene) 99%	127-18-4	480	6	ASTM F739	3	++
Tetraethyl Orthosilicate 100%	78-10-4	480	6	ASTM F739	4	++
Tetramethyl Ammonium Hydroxide 25%	75-59-2	720	5	ASTM F739	4	++
Toluene 99%	108-88-3	10	0	ASTM F739	1	-
Triethanolamine 98%	102-71-6	480	6	ASTM F739	4	++
Trimethylphosphite 97%	121-45-9	24	1	ASTM F739	NT	NA
Turpentine mixture	8006-64-2	480	6	ASTM F739	4	++
Unleaded gasoline mixture	8006-61-9	480	6	ASTM F739	4	++
Xylene 99%	1330-20-7	38	2	ASTM F739	1	-

\*not normalized result

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