



## **Chemical Compatibility Guide for: Best® Nitri-Solve® Gloves**

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Chemical Tested	CAS Number	Concentration	ASTM F 739 Permeation Resistance to Heavy Exposure Breakthrough Time in Minutes	Rate in µg/cm <sup>2</sup> /min	EN 374 Rating (0 to 6)	ASTM F1383 Permeation Resistance to Limited Exposure Breakthrough Time in Minutes	Rate in µg/cm <sup>2</sup> /min	EN 374 Rating (0 to 6)	5 Min.	30 Min.	60 Min.	240 Min.
<a href="#">Acetaldehyde</a>	75-07-0	100%	NR	NR	0	10	183	1	>G	NR	NR	NR
<a href="#">Acetic Acid</a>	64-19-7	84%	240	1779	5	>240	ND	5	>E	E	G	F
<a href="#">Acetone</a>	67-64-1	100%	3	265	0	18	50	1	>F	NR	NR	NR
<a href="#">Acetonitrile</a>	75-05-8	100%	6	182	0	21	41	1	>E	F	F	F
<a href="#">Acetophenone</a>	98-86-2	100%	NR	NR	0	50	124	2	>G	NR	NR	NR
<a href="#">Acetoxycetyl Chloride</a>	13831-31-7	100%	150	350	4	180	271	4	>E	G	F	F
<a href="#">Acrylamide</a>	79-06-1	50%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Acrylonitrile</a>	107-13-1	100%	NR	NR	0	16	22	1	>F	NR	NR	NR
<a href="#">Alkasol 27</a>	90111-76-3	10%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Allyl Alcohol</a>	107-18-6	99%	63	96	3	71	62	3	>E	G	F	F
<a href="#">Alodine 1000 Solution</a>	97631-99-6	1%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Alodine 1200s Solution</a>	93755-29-8	2%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Ammonia (gas)</a>	7664-41-7	100%	336	0.6	5	NT	NT	NT	>E	E	E	E
<a href="#">Ammonium Hydroxide</a>	1336-21-6	29%	240	27	5	>240	ND	5	>E	E	E	E
<a href="#">Amyl Acetate</a>	628-63-7	100%	77	119	3	>240	ND	5	>E	E	F	P
<a href="#">Amyl Alcohol</a>	71-41-0	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Aniline</a>	62-53-3	100%	NR	NR	0	>240	ND	5	>F	NR	NR	NR
<a href="#">Antimony Tributrylate</a>	53856-17-0	95%	>480	ND	6	>240	ND	5	>NT	NT	NT	NT
<a href="#">Aqua Regia</a>	8007-56-5	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Battery Acid</a>	7664-93-9	47%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Benzaldehyde</a>	100-52-7	100%	NR	NR	0	50	43	2	>F	NR	NR	NR
<a href="#">Benzene</a>	71-43-2	100%	16	164	1	101	2.3	3	>E	G	P	P
<a href="#">Benzyl Alcohol</a>	100-51-6	100%	>480	ND	6	>240	ND	5	>E	E	E	E

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<a href="#">Blasocut 2000 Universal</a>	98608-26-6	70%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Blasocut 2000 Universal</a>	98608-26-6	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Blasocut 4000</a>	94742-52-7	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Bleach: Sodium Hypochlorite (4-6%)</a>	7681-52-9	6%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Boric Acid-sulfuric Acid</a>	90043-35-4	1%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Boric Acid-sulfuric Acid</a>	90043-35-4	6%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Boric Acid-sulfuric Acid</a>	90043-35-4	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Bromoethyl Acetate, 2-</a>	927-68-4	100%	51	9	2	54	8	2	>E	NR	NR	NR
<a href="#">Bromoform</a>	75-25-2	100%	NR	NR	0	64	141	3	>G	NR	NR	NR
<a href="#">Brulin Mp 1793 Hydrocarbon Mixture</a>	64742-48-9	100%	>480		6	>240	ND	5	>E	E	E	E
<a href="#">Butadiene 1,3-(gas)</a>	106-99-0	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Butanol</a>	71-36-3	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Butoxypropanol</a>	5131-66-8	100%	90	14	3	>240	ND	5	>E	E	E	E
<a href="#">Butoxytriglycol</a>	143-22-6	100%	>480	ND	6	>240	ND	5	>E	E	G	G
<a href="#">Butyl Acetate</a>	123-86-4	100%	78	135	3	82	34	3	>E	G	F	NR
<a href="#">Butyl Acrylate</a>	141-32-2	100%	65	28	3	107	2	3	>E	E	G	P

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<a href="#">Butyl Carbitol Solvent</a>	112-34-5	100%	>480	ND	6	>240	ND	5	>E	E	E	G
<a href="#">Butyl Cellosolve Acetate</a>	112-07-2	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Butyl Cellosolve Solvent</a>	111-76-2	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Butyl Dipropasol Solvent</a>	29911-28-2	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Butyl Toluene P-tert-</a>	98-51-1	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Butylamine</a>	109-73-9	100%	NR	NR	0	NT	NT	NT	>F	NR	NR	NR
<a href="#">Caprinus U Multigrade Railroad Oil</a>	66532-00-0	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Carbitol Acetate</a>	112-15-2	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Carbon Disulfide</a>	75-15-0	100%	NR	NR	0	NT	NT	NT	>G	F	NR	NR
<a href="#">Carbon Tetrachloride</a>	56-23-5	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Cascade Columbia 3 Part A</a>	90112-34-7	100%	>480	ND	6	>240	ND	5	>E	E	E	G
<a href="#">Cellosolve Acetate</a>	110-80-5	100%	47	66	2	109	26	3	>E	G	P	NR
<a href="#">Chevron Jet Fuel A</a>	94742-80-1	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Chlorine (gas)</a>	7782-50-5	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Chlorobenzene</a>	108-90-7	100%	NR	NR	0	66	48	3	>E	P	NR	NR
<a href="#">Chloroform</a>	67-66-3	100%	6	478	0	24	343	1	>NR	NR	NR	NR
<a href="#">Chromic Acid</a>	1333-82-0	50%	>480	ND	6	>240	ND	5	>E	E	E	E

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<a href="#">Citra-safe Deodorizer</a>	95989-27-5	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Citric Acid</a>	77-92-9	30%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Citrus Terpenes Mixture</a>	68956-56-9	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Cresols</a>	1319-77-3	100%	NR	NR	0	>240	ND	5	>E	G	P	NR
<a href="#">Cumene</a>	98-82-8	100%	30	64	2	33	35	2	>G	F	NR	NR
<a href="#">Cyclohexane</a>	110-82-7	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Cyclohexanol</a>	108-93-0	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Cyclohexanone</a>	108-94-1	100%	60	148	3	>240	ND	5	>E	F	NR	NR
<a href="#">Daraclean 282</a>	90112-34-9	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Deoxidizer 16 Replenisher</a>	97664-39-5	40%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Desoclean 45 Mixture</a>	90067-63-1	50%	17	619	1	NT	NT	NT	>F	P	NR	NR
<a href="#">Desoclean 45 Mixture</a>	90067-63-1	100%	17	619	1	NT	NT	NT	>F	P	NR	NR
<a href="#">Di-isobutyl Ketone</a>	108-83-8	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Dibutyl Phthalate N-</a>	84-74-2	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Dichlorobenzene O-</a>	95-50-1	100%	NR	NR	0	60	10	3	>E	P	NR	NR
<a href="#">Dichloroethane 1,2-</a>	107-06-2	100%	6	331	0	44	68	2	>P	NR	NR	NR
<a href="#">Diesel Fuel</a>	77650-28-3	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Diethanolamine</a>	111-42-2	100%	>480	ND	6	>240	ND	5	>E	E	E	E

Chemical Tested	CAS Number	Concentration	ASTM F 739 Permeation Resistance to Heavy Exposure Breakthrough Time in Minutes	Rate in µg/cm <sup>2</sup> /min	EN 374 Rating (0 to 6)	ASTM F1383 Permeation Resistance to Limited Exposure Breakthrough Time in Minutes	Rate in µg/cm <sup>2</sup> /min	EN 374 Rating (0 to 6)	5 Min.	30 Min.	60 Min.	240 Min.
<a href="#">Diethylamine</a>	109-89-7	100%	60	2007	3	60	236	3	>E	G	F	P
<a href="#">Diethylene Glycol</a>	111-46-6	99%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Diethylene Glycol Monomethyl Ether</a>	111-77-3	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Diethylene Glycol Monopropyl Ether</a>	6881-94-3	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Dimethyl Formamide</a>	68-12-2	100%	NR	NR	0	25	34	1	>P	P	P	P
<a href="#">Dimethyl Sulfate</a>	77-78-1	100%	15	158	1	120	97	4	>E	E	G	F
<a href="#">Dimethylacetamide N,n-</a>	127-19-5	100%	NR	NR	0	>240	ND	5	>P	NR	NR	NR
<a href="#">Dimethylsulfoxide</a>	67-68-5	100%	>480	ND	6	>240	ND	5	>E	G	G	P
<a href="#">Dinitrol Av30 Spray</a>	94894-36-1	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Dinitrol Av8 Mod</a>	94742-48-1	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Dinitrotoluene (40% In Roh)</a>	121-14-2	40%	NR	NR	0	NT	NT	NT	>G	P	NR	NR
<a href="#">Dioxane 1,4-</a>	123-91-1	100%	4	167	0	51	98	2	>G	F	NR	NR
<a href="#">Divinyl Benzene</a>	1321-74-0	100%	165	38	4	>240	ND	5	>E	E	G	NR
<a href="#">Donax Tg Transmission Fluid</a>	60486-00-0	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Dowtherm, Biphenyl</a>	92-52-4	27%	>480	ND	6	>240	ND	5	>E	E	E	F
<a href="#">Dubl-chek Penetrant Mixture</a>	68131-40-8	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Epichlorohydrin</a>	106-89-8	100%	NR	NR	0	23	45	1	>P	NR	NR	NR
<a href="#">Ethanol</a>	64-17-5	100%	225	216	4	>240	ND	5	>E	E	E	G

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<a href="#">Ethanolamine</a>	141-43-5	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Ethoxytriglycol</a>	112-50-5	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Ethyl Acetate</a>	141-78-6	100%	30	218	2	77	2.2	3	>E	F	P	P
<a href="#">Ethyl Benzene</a>	100-41-4	100%	43	124	2	130	10	4	>E	G	G	NR
<a href="#">Ethyl Butanol</a>	97-95-0	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Ethyl Ether</a>	60-29-7	100%	33	36	2	>240	ND	5	>E	E	E	G
<a href="#">Ethylene Glycol</a>	107-21-1	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Ethylene Glycol Monohexyl Ether</a>	112-25-4	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Ethylene Oxide (gas)</a>	75-21-8	100%	17	500	1	NT	NT	NT	>E	E	E	E
<a href="#">Ethylenediamine</a>	107-15-3	99%	>480	ND	6	>240	ND	5	>E	E	G	G
<a href="#">Fcc-55</a>	90108-10-2	100%	42	77	2	NT	NT	NT	>G	NR	NR	NR
<a href="#">Fluoboric Acid</a>	16872-11-0	49%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Formaldehyde</a>	50-00-0	37%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Formic Acid</a>	64-18-6	90%	75	8	3	NT	NT	NT	>G	P	NR	NR
<a href="#">Freon 113</a>	76-13-1	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Furfural</a>	98-01-1	100%	NR	NR	0	43	3	2	>F	NR	NR	NR
<a href="#">Gasoline (unleaded)</a>	8006-61-9	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Glutaraldehyde</a>	111-30-8	50%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Heptane</a>	142-82-5	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Hexane</a>	110-54-3	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Hexene</a>	592-41-6	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Hexyl Carbitol Solvent</a>	112-59-4	100%	>480	ND	6	>240	ND	5	>E	E	E	E

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<a href="#">Huntsman Dimethylcyclohexyl Amine</a>	98-94-2	100%	75	143	3	NT	NT	NT	>NT	NT	NT	NT
<a href="#">Huntsman Dimethylpiperazine</a>	106-58-1	100%	210	51	4	NT	NT	NT	>NT	NT	NT	NT
<a href="#">Huntsman Jeffcat Dmdee</a>	6425-39-4	100%	345	40	5	NT	NT	NT	>NT	NT	NT	NT
<a href="#">Huntsman Methylmorpholine</a>	7529-22-8	65%	>480	ND	6	>240	ND	5	>NT	NT	NT	NT
<a href="#">Hydrazine Hydrate</a>	302-01-2	85%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Hydrochloric Acid</a>	7647-01-0	10%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Hydrochloric Acid</a>	7647-01-0	37%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Hydrochloric Acid</a>	7647-01-0	100%	433	0.64	NT	>480	ND	6	>E	E	E	E
<a href="#">Hydrofluoric Acid</a>	7664-39-3	48%	60	43	3	NT	NT	NT	>E	E	E	P
<a href="#">Hydrofluoric Acid</a>	7664-39-3	100%	1	10	3	NT	NT	NT	>E	E	E	P
<a href="#">Hydrogen Chloride (gas)</a>	1/2/7647	100%	433	0.64	5	>480	ND	6	>E	E	E	E
<a href="#">Hydrogen Fluoride (gas)</a>	7664-39-2	100%	1	10	0	NT	NT	NT	>E	E	E	E
<a href="#">Hydrogen Peroxide</a>	7722-84-1	30%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Iso Amyl Acetate</a>	123-92-2	100%	227	7	4	>240	ND	5	>E	E	E	G
<a href="#">Iso Amyl Alcohol</a>	123-51-3	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Iso-butanol</a>	78-83-1	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Iso-octane</a>	540-84-1	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Isopropyl Acetate</a>	108-21-4	98%	68	353	3	73	57	3	>E	E	G	P
<a href="#">Isopropyl Alcohol</a>	67-63-0	100%	>480	ND	6	>240	ND	5	>E	E	E	E



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<a href="#">Jet Fuel Jp-4</a>	94742-47-9	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Jet Fuel Jp-8</a>	98008-20-6	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Kerosene</a>	8008-20-6	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Lacquer Thinner 1025 Star Brand</a>	74475-85-6	100%	NR	NR	0	NT	NT	NT	>G	NR	NR	NR
<a href="#">Lacquer Thinner 305 Acme Brand</a>	80108-88-6	100%	NR	NR	0	NT	NT	NT	>E	NR	NR	NR
<a href="#">Lacquer Thinner 887 Acme Brand</a>	70108-88-6	100%	52	59	2	NT	NT	NT	>G	G	F	P
<a href="#">Lacquer Thinner Ez Brand</a>	90108-88-6	100%	NR	NR	0	NT	NT	NT	>G	P	NR	NR
<a href="#">Lacquer Thinner Rk120 Sherwin Williams</a>	94475-85-6	100%	187	68	4	NT	NT	NT	>E	G	F	P
<a href="#">Lacquer Thinner Rk22 Sherwin Williams Brand</a>	84475-85-6	100%	NR	NR	0	NT	NT	NT	>G	NR	NR	NR
<a href="#">Lactic Acid</a>	50-21-5	85%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Lauric Acid (35% Etoh)</a>	143-07-7	35%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Limonene D-</a>	5989-27-5	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Madrella P 150 Oil</a>	56930-00-0	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Mek/sba</a>	90078-92-3	100%	59	96	2	NT	NT	NT	>E	G	F	P
<a href="#">Methanol</a>	67-56-1	100%	28	41	1	84	5	3	>E	E	G	G
<a href="#">Methoxytriglycol</a>	112-35-6	100%	>480	ND	6	>240	ND	5	>E	E	E	G

Chemical Tested	CAS Number	Concentration	ASTM F 739 Permeation Resistance to Heavy Exposure Breakthrough Time in Minutes	Rate in µg/cm <sup>2</sup> /min	EN 374 Rating (0 to 6)	ASTM F1383 Permeation Resistance to Limited Exposure Breakthrough Time in Minutes	Rate in µg/cm <sup>2</sup> /min	EN 374 Rating (0 to 6)	5 Min.	30 Min.	60 Min.	240 Min.
<a href="#">Methyl Acetate</a>	79-20-9	100%	12	307	1	17	145	1	>G	NR	NR	NR
<a href="#">Methyl Chloride (gas)</a>	74-87-3	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Methyl Ethyl Ketone</a>	78-93-3	100%	NR	NR	0	21	94	1	>NR	NR	NR	NR
<a href="#">Methyl Ethyl Ketoxime</a>	96-29-7	1%	>480	ND	6	>240	ND	5	>P	NR	NR	NR
<a href="#">Methyl Ethyl Ketoxime</a>	96-29-7	100%	>480	ND	6	>240	ND	5	>P	NR	NR	NR
<a href="#">Methyl Iodide</a>	74-88-4	100%	NR	NR	0	47	6	2	>F	NR	NR	NR
<a href="#">Methyl Isobutyl Ketone</a>	108-10-1	100%	NR	NR	0	32	1528	2	>E	G	P	NR
<a href="#">Methyl Isobutyl Ketoxime</a>	105-44-2	100%	>480	ND	6	>240	ND	5	>NT	NT	NT	NT
<a href="#">Methyl Methacrylate</a>	80-62-6	100%	NR	NR	0	15	110	1	>E	F	P	NR
<a href="#">Methyl Propasol Solvent</a>	107-98-2	100%	>480	ND	6	>240	ND	5	>E	E	E	G
<a href="#">Methyl Propyl Ketone</a>	107-87-9	100%	14	3	1	NT	NT	NT	>F	NR	NR	NR
<a href="#">Methyl Pyrrolidone N-</a>	872-50-4	100%	34	43	2	48	29	2	>E	E	E	E
<a href="#">Methyl-tert-butyl Ether</a>	1634-04-4	100%	211	1	4	>240	ND	5	>E	E	E	E
<a href="#">Methylamine</a>	74-89-5	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Methylene Bisphenyl Isocyanate</a>	101-68-8	100%	>480	ND	6	>240	ND	5	>NT	NT	NT	NT

Chemical Tested	CAS Number	Concentration	ASTM F 739 Permeation Resistance to Heavy Exposure Breakthrough Time in Minutes	Rate in $\mu\text{g}/\text{cm}^2/\text{min}$	EN 374 Rating (0 to 6)	ASTM F1383 Permeation Resistance to Limited Exposure Breakthrough Time in Minutes	Rate in $\mu\text{g}/\text{cm}^2/\text{min}$	EN 374 Rating (0 to 6)	5 Min.	30 Min.	60 Min.	240 Min.
<a href="#">Methylene Chloride</a>	75-09-2	100%	4	249	0	5	141	0	>NR	NR	NR	NR
<a href="#">Methylenedianiline 4,4- (190 C)</a>	101-77-9	100%	NR	NR	0	NT	NT	NT	>G	NR	NR	NR
<a href="#">Microcut 26</a>	98330-12-9	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Mineral Oil - Light</a>	8012-95-1	100%	NT	NT	6	NT	NT	NT	>E	E	E	E
<a href="#">Mineral Spirits</a>	64475-85-0	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Morpholine</a>	110-91-8	100%	NR	NR	0	96	96	3	>E	P	NR	NR
<a href="#">Muriatic Acid (10% Hcl)</a>	1/1/7647	10%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Naphtha</a>	8032-32-4	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Nitric Acid</a>	7697-37-1	23%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Nitric Acid</a>	7697-37-2	23%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Nitric Acid</a>	7697-37-2	70%	NR	NR	0	NT	NT	NT	>E	P	NR	NR
<a href="#">Nitric/hydrofluoric Pickling Solution</a>	97697-37-4	50%	>480	ND	6	>240	ND	5	>E	E	G	G
<a href="#">Nitrobenzene</a>	98-95-3	100%	52	125	2	67	66	3	>E	P	NR	NR
<a href="#">Nitromethane</a>	75-52-5	100%	NR	NR	0	16	57	1	>G	P	NR	NR
<a href="#">Nitropropane</a>	79-46-9	100%	NR	NR	0	34	155	2	>G	P	NR	NR
<a href="#">Nycote 7-11 Mixture</a>	90064-17-7	100%	104	13	3	NT	NT	NT	>E	G	F	P
<a href="#">Octanol N-</a>	111-87-5	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Oleic Acid</a>	112-80-1	98%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Olive Oil</a>	8001-25-0	100%	NT	NT	6	NT	NT	NT	>E	E	E	E
<a href="#">Oxybisbenzene, 1,1- (downtherm)</a>	101-84-8	73%	>480	ND	6	>240	ND	5	>E	E	E	F

Chemical Tested	CAS Number	Concentration	ASTM F 739 Permeation Resistance to Heavy Exposure Breakthrough Time in Minutes	Rate in µg/cm <sup>2</sup> /min	EN 374 Rating (0 to 6)	ASTM F1383 Permeation Resistance to Limited Exposure Breakthrough Time in Minutes	Rate in µg/cm <sup>2</sup> /min	EN 374 Rating (0 to 6)	5 Min.	30 Min.	60 Min.	240 Min.
<a href="#">Pcbs (acroclor 1254)</a>	11097-69-1	100%	>480	ND	6	>240	ND	5	>E	E	E	G
<a href="#">Pentachlorophenol (5% In Kerosene)</a>	87-86-5	5%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Pentane</a>	109-66-0	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Perchloroethylene</a>	127-18-4	100%	>480	ND	6	>240	ND	5	>E	E	E	G
<a href="#">Phenol</a>	108-95-2	100%	NR	NR	0	14	3	1	>F	NR	NR	NR
<a href="#">Phosphoric Acid</a>	7664-38-2	85%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Potassium Hydroxide</a>	1310-58-3	45%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Propanediamine, N,n'-dimethyl</a>	109-55-7	100%	75	143	3	NT	NT	NT	>NT	NT	NT	NT
<a href="#">Propanol N-</a>	71-23-8	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Propoxypropanol</a>	1569-01-3	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Propyl Acetate</a>	109-60-4	100%	NR	NR	0	20	121	1	>E	F	P	NR
<a href="#">Propyl Cellosolve N-</a>	2807-30-9	100%	391	16	5	>240	ND	5	>E	E	E	F
<a href="#">Propylene Glycol</a>	57-55-6	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Propylene Oxide</a>	75-56-9	100%	NR	NR	0	9	108	0	>NR	NR	NR	NR
<a href="#">Pseudocumene</a>	95-63-6	98%	327	38	5	>480	ND	6	>E	E	E	E
<a href="#">Pyridine</a>	7291-22-7	100%	NR	NR	0	23	235	1	>P	NR	NR	NR
<a href="#">Refrigerant 123a</a>	306-83-2	100%	NR	NR	0	NT	NT	NT	>F	NR	NR	NR
<a href="#">Refrigerant 141b</a>	1717-00-6	100%	34	1332	2	NT	NT	NT	>E	E	G	P
<a href="#">Roundup (concentrated)</a>	1071-83-6	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Safrotin</a>	31218-83-4	50%	>480	ND	6	>240	ND	5	>E	E	E	E

Chemical Tested	CAS Number	Concentration	ASTM F 739 Permeation Resistance to Heavy Exposure Breakthrough Time in Minutes	Rate in µg/cm <sup>2</sup> /min	EN 374 Rating (0 to 6)	ASTM F1383 Permeation Resistance to Limited Exposure Breakthrough Time in Minutes	Rate in µg/cm <sup>2</sup> /min	EN 374 Rating (0 to 6)	5 Min.	30 Min.	60 Min.	240 Min.
<a href="#">Shell Aeroshell Grease 22</a>	56280-00-0	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Shell Alvania Grease 3</a>	57120-00-0	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Shell Diala Oil Ax Base Oil</a>	60030-00-0	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Shell Fire &amp; Ice 2000 10w Oil</a>	60015-00-0	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Shell Hvi 100 Neutral Mq</a>	63050-00-0	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Shell Rotella T Multi 15w Oil</a>	71630-00-0	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Shell Spirax S 85w/140 Oil</a>	86404-00-0	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Shell Turbo T 68 Hydraulic Fluid</a>	60220-00-0	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Shellwax 100</a>	8210-00-0	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Skydrol 500 B-4</a>	126-73-8	100%	>480	ND	6	>240	ND	5	>E	E	G	P
<a href="#">Skydrol Ld-4 Hydraulic Fluid</a>	2528-36-1	100%	>480	ND	6	>240	ND	5	>E	E	G	F
<a href="#">Sodium Hydroxide</a>	1310-73-2	50%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Stoddard Solvent</a>	8052-41-3	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Styrene</a>	100-42-5	100%	NR	NR	0	15	294	1	>G	P	NR	NR
<a href="#">Sulfuric Acid</a>	7664-93-9	47%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Sulfuric Acid</a>	7664-93-9	97%	180	48	4	NT	NT	NT	>E	G	F	NR
<a href="#">Tannic Acid</a>	1401-55-4	50%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Tetrahydrofuran</a>	109-99-9	100%	5	172	0	18	54	1	>E	NR	NR	NR
<a href="#">Toluene</a>	108-88-3	100%	26	255	1	36	98	2	>E	F	P	NR

Chemical Tested	CAS Number	Concentration	ASTM F 739 Permeation Resistance to Heavy Exposure Breakthrough Time in Minutes	Rate in µg/cm <sup>2</sup> /min	EN 374 Rating (0 to 6)	ASTM F1383 Permeation Resistance to Limited Exposure Breakthrough Time in Minutes	Rate in µg/cm <sup>2</sup> /min	EN 374 Rating (0 to 6)	5 Min.	30 Min.	60 Min.	240 Min.
<a href="#">Toluene Diisocyanate</a>	584-84-9	100%	299	11	5	>240	ND	5	>E	E	G	P
<a href="#">Toluene/mek Mixture (65:3 Ratio)</a>	90108-88-5	65%	7	331	0	NT	NT	NT	>G	NR	NR	NR
<a href="#">Toluidine_o-</a>	95-53-4	100%	NR	NR	0	>240	ND	5	>E	P	NR	NR
<a href="#">Trichlorobenzene 1,2,4-</a>	120-82-1	100%	100	154	3	>240	ND	5	>E	E	G	NR
<a href="#">Trichloroethane 1,1,1-</a>	71-55-6	100%	49	174	2	>240	ND	5	>E	E	G	NR
<a href="#">Trichloroethylene</a>	79-01-6	100%	NR	NR	0	128	0.3	4	>G	NR	NR	NR
<a href="#">Tricresyl Phosphate</a>	1330-78-5	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Triethanolamine</a>	120-71-6	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Turco 5351 Mixture</a>	90075-09-4	100%	12	335	1	NT	NT	NT	>NR	NR	NR	NR
<a href="#">Turco 6709</a>	90107-98-4	100%	>480	ND	6	>240	ND	5	>E	E	E	G
<a href="#">Turpentine</a>	8006-64-2	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Ucon Quenchant A ro Mixture</a>	97632-00-0	55%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Urethane Catalyst Alkanol</a>	83016-70-0	100%	165	20	4	NT	NT	NT	>NT	NT	NT	NT
<a href="#">Vegetable Oil</a>	8001-30-7	100%	NT	NT	6	NT	NT	NT	>E	E	E	E
<a href="#">Vinyl Acetate</a>	108-05-4	100%	20	224	1	45	5	2	>F	P	P	P
<a href="#">Vinyl Chloride (gas)</a>	75-01-4	100%	>480	ND	6	>240	ND	5	>E	E	E	E
<a href="#">Vinylidene Choride</a>	75-35-4	100%	NR	NR	0	34	39	2	>G	NR	NR	NR

Chemical Tested	CAS Number	Concentration	ASTM F 739 Permeation Resistance to Heavy Exposure Breakthrough Time in Minutes	Rate in $\mu\text{g}/\text{cm}^2/\text{min}$	EN 374 Rating (0 to 6)	ASTM F1383 Permeation Resistance to Limited Exposure Breakthrough Time in Minutes	Rate in $\mu\text{g}/\text{cm}^2/\text{min}$	EN 374 Rating (0 to 6)	5 Min.	30 Min.	60 Min.	240 Min.
<a href="#">Xylene</a>	1330-20-7	100%	41	122	2	>240	ND	5	>E	G	F	NR

## EN 374 RATINGS

Rating	Description
0	10 minutes breakthrough time; Dangerous selection.
1	> 10 minutes breakthrough time; Very poor; Splashes only; Change quickly.
2	> 30 minutes breakthrough time; Poor choice; Change quickly when exposed.
3	> 60 minutes breakthrough time; Sometimes satisfactory; Change soon after exposure.
4	> 120 minutes breakthrough time; Good selection; Change after two hours.
5	> 240 minutes breakthrough time; Next best selection; Change after four hours.
6	> 480 minutes breakthrough time; Safest best selection with high rating attainable.

## Cut Resistance Ratings

Rating	Description
0	< 200 grams of weight needed to cut through material with 25 mm of blade travel
1	> 200 grams of weight needed to cut through material with 25 mm of blade travel
2	> 500 grams of weight needed to cut through material with 25 mm of blade travel
3	> 1000 grams of weight needed to cut through material with 25 mm of blade travel
4	> 1500 grams of weight needed to cut through material with 25 mm of blade travel
5	> 3000 grams of weight needed to cut through material with 25 mm of blade travel

Degradation is the physical change in a glove after chemical exposure. Typical effects may be swelling, wrinkling, deterioration, or delamination. There are no accepted standards for measuring degradation. Best degradation testing is based on a protocol considered by the ASTM F23 Protective Clothing Committee. One side of the glove material is exposed to the test chemical for four hours. The percent weight change is measured at four time intervals: 5, 30, 60 and 240 minutes. The gravimetric ratings are ranked as shown below.

Key	Rating	Weight Change
E	Excellent	0-10%
G	Good	11-20%
F	Fair	21-30%
P	Poor	31-50%
NR	Not Recommended	Above 50%

Where degradation rating is poor (P) or not recommended (NR) after 60 minutes, the material is not tested for permeation resistance. Permeation results are listed as not recommended (NR) because of severe degradation. **WARNING:** Weight change is only our measure of degradation and does not account for certain physical changes such as hardening of PVC.