

Chemical Product	CAS #	Breakthrough time (minutes)	Permeation level	Standard	Degradatio level	Rating
1,1,1-Trichloroethane 99%	71-55-6	20	1	ASTM F739	1	-
1,1,2-Trichloroethane 97%	79-00-5	7	0	ASTM F739	2	-
1,2 - dichloroethane 99%	107-06-2	6	0	ASTM F739	NT	NA
2-Bromo-ethyl acetate 97%	927-68-4	52	2	ASTM F739	2	=
2-Hydroxyethyl Methacrylate 97%	868-77-9	480	6	ASTM F739	NT	NA
2-Propanol (Isopropanol) 99%	67-63-0	450	5	ASTM F739	4	++
2,4-Di-tertiary Butylphenol 99%	96-76-4	29	1	ASTM F739	NT	NA
2,6-Dimethyl-4-Heptanone (Diisobutyl Ketone) 80%	108-83-8	56	2	ASTM F739	3	+
Acetaldehyde 99%	75-07-0	5	0	ASTM F739	NT	NA
Acetic acid 10%	64-19-7	NT	NT		4	NA
Acetic acid 50%	64-19-7	NT	NT		4	NA
Acetic acid 99%	64-19-7	210	4	ASTM F739	4	++
Acetone 99%	67-64-1	8	0	ASTM F739	3	=
Acetonitrile 99%	75-05-8	62	3	EN 16523-1:2015	4	++
Acrylate 2-Hydroxyethyl 96%	818-61-1	480	6	ASTM F739	NT	NA
Acrylic acid 99%	79-10-7	268	5	EN 16523-1:2015	4	++
Acrylonitrile 99%	107-13-1	19	1	ASTM F739	NT	NA
Ammonium hydroxide solution 29%	1336-21-6	265	5	ASTM F739	4	++
Amyl Acetate 99%	628-63-7	25	1	ASTM F739	2	=
Amyl Alcohol 99%	71-41-0	480	6	ASTM F739	4	++
Aniline 99%	62-53-3	142	4	ASTM F739	4	++
Benzene 99%	71-43-2	3	0	ASTM F739	NT	NA
Benzotrichloride 100%	98-07-7	63	3	ASTM F739	NT	NA
Benzoyl Chloride 100%	98-88-4	28	1	ASTM F739	NT	NA
Benzyl Chloride 99%	100-44-7	17	1	ASTM F739	2	=
Butyl Acetate 99%	123-86-4	17	1	ASTM F739	1	-

\*not normalized result

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Butyl Acrylate 99%	141-32-2	15	1	ASTM F739	1	-
Calcium Hydroxide 0,18%	1305-62-0	480	6	ASTM F739	4	++
Carbon disulfide 99%	75-15-0	1	0	ASTM F739	3	=
Carbon Tetrachloride 99%	56-23-5	24	1	ASTM F739	3	=
Chlorine 100%	7782-50-5	480	6	ASTM F739	NT	NA
Chlorine 99%	7782-50-5	44	2	ASTM F739	NT	NA
Chloroform 99%	67-66-3	2	0	ASTM F739	NT	NA
Chromic Acid 50%	7738-94-5	348	5	ASTM F739	4	++
Cumene 98%	98-82-8	22	1	ASTM F739	1	-
Cyclohexane 99%	110-82-7	35	2	ASTM F739	3	+
Cyclohexanol 99%	108-93-0	480	6	ASTM F739	4	++
Cyclooctadiene 99%	111-78-4	23	1	ASTM F739	NT	NA
Dibutyl Phthalate 99%	84-74-2	480	6	ASTM F739	4	++
Dichloromethane (Methylene Chloride) 99%	75-09-2	4	0	ASTM F739	3	=
Diethylamine 98%	109-89-7	4	0	ASTM F739	NT	NA
Dimethyl Sulfide 99%	75-18-3	2	0	ASTM F739	1	-
Dimethylformamide 99%	68-12-2	30	1	ASTM F739	3	=
Dimethylsulfoxide 99%	67-68-5	456	5	ASTM F739	4	++
Diphenyl Phospite NA	4712-55-4	480	6	ASTM F739	NT	NA
Ethanol 95%	64-17-5	363	5	ASTM F739	4	++
Ether (Diethyl Ether) 99%	60-29-7	4	0	ASTM F739	3	=
Ethyl acetate 99%	141-78-6	8	0	ASTM F739	NT	NA
Ethyl acrylate 99%	140-88-5	18	1	ASTM F739	1	-
Ethyl benzene 99%	100-41-4	1	0	ASTM F739	NT	NA
Ethyl Chloroformate 97%	541-41-3	4	0	ASTM F739	2	-
Ethylene glycol 99%	107-21-1	480	6	ASTM F739	4	++

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		Breakthrough	Barra dia		Danie datio	
Chemical Product	CAS #	time (minutes)	Permeation level	Standard	Degradatio level	Rating
Formaldehyde 37%	50-00-0	480	6	ASTM F739	4	++
Formic Acid 96%	64-18-6	NT	NT		4	NA
Fuel oils mixture	68476-34-6	480	6	ASTM F739	NT	NA
Glutaraldehyde 50%	111-30-8	NT	NT		4	NA
Hexachlorocyclopentadiene 100%	77-47-4	30	1	ASTM F739	NT	NA
Hydrazine 35%	302-01-2	480	6	ASTM F739	4	++
Hydrazine 70%	302-01-2	NT	NT		4	NA
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 10%	7664-39-3	480	6	ASTM F739	4	++
Hydrofluoric Acid 40%	7664-39-3	480	6	EN 16523-1:2015	NT	NA
Hydrofluoric Acid 49%	7664-39-3	480	6	ASTM F739	4	++
Hydrogen fluoride Anhydrous 99% Gas	7664-39-3	35	2	ASTM F739	NT	NA
Hydrogen peroxide 30%	7722-84-1	480	6	EN 16523-1:2015	4	++
Hypophosphorous Acid 50%	6303-21-5	480	6	ASTM F739	NT	NA
Isobutyl alcohol 99%	78-83-1	480	6	ASTM F739	4	++
m,o,p-Chlorotoluene mixture	25168-05-2	15	1	ASTM F739	NT	NA
Maleic Acid 9,1%	110-16-7	480	6	ASTM F739	4	++
meta-Xylene 99%	108-38-3	NT	NT		2	NA
Methanol 85%	67-56-1	480	6	EN 374-3:2003	4	++
Methanol 99%	67-56-1	262	5	EN 16523-1:2015	4	++
Methyl Ethyl Ketone (2-Butanone) 99%	78-93-3	9	0	ASTM F739	1	-
Methyl methacrylate 95%	80-62-6	15	1	EN 374-3:2003	1	-
Methylamine 40%	74-89-5	391	5	ASTM F739	4	++

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Methylisobutylketone 99%	108-10-1	19	1	ASTM F739	2	=
Mineral Spirits 100%	64475-85-0	127	4	ASTM F739	NT	NA
n-Butanol 99%	71-36-3	480	6	ASTM F739	4	++
n-Heptane 99%	142-82-5	50	2	ASTM F739	4	+
n-hexane 95%	110-54-3	36	2	ASTM F739	4	+
N-methyl-2-Pyrrolidone 99%	872-50-4	71	3	EN 16523-1:2015	NT	NA
N-N dimethyl acetamide 99%	127-19-5	45	2	ASTM F739	2	=
n-Propanol 99%	71-23-8	480	6	ASTM F739	4	++
N,N-Diisopropylethylamine 99%	7087-68-5	301	5	ASTM F739	4	++
Naphtha (Stoddart Solvent) mixture	8052-41-3	241	5	ASTM F739	3	++
Naphtha Heavy mixture	68551-17-7	NT	NT		4	NA
Naphtha VM&P mixture	8032-32-4	23	1	ASTM F739	4	+
Nitric acid 10%	7697-37-2	NT	NT		4	NA
Nitric acid 20%	7697-37-2	NT	NT		4	NA
Nitric acid 40%	7697-37-2	NT	NT		4	NA
Nitric acid 50%	7697-37-2	NT	NT		4	NA
Nitric acid 65%	7697-37-2	480	6	EN 16523-1:2015	4	++
Nitric acid 68%	7697-37-2	NT	NT		4	NA
Nitric acid 70%	7697-37-2	NT	NT		4	NA
Nitric acid 90%	7697-37-2	3	0	ASTM F739	NT	NA
Nitrobenzene 99%	98-95-3	52	2	ASTM F739	NT	NA
Nonylphenol 99%	25154-52-3	480	6	ASTM F739	NT	NA
Oleic Acid 90%	112-80-1	NT	NT		3	NA
Oleum (free SO3) 30%	8014-95-7	10	0	ASTM F739	NT	NA
Parachlorobenzotrichloride 99%	5216-25-1	70	3	ASTM F739	NT	NA
Pentane 99%	109-66-0	NT	NT		4	NA

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Phenol 85%	108-95-2	480	6	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	++
Potassium Iodide 59%	7681-11-0	480	6	ASTM F739	4	++
Propylene Oxide 99%	75-56-9	1	0	ASTM F739	NT	NA
Pyridine 99%	110-86-1	10	0	ASTM F739	1	
Sodium Carbonate 21,6%	497-19-8	480	6	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	++
Sodium Thiosulfate 41,2%	7772-98-7	480	6	ASTM F739	4	++
Styrene 99%	100-42-5	2	0	ASTM F739	NT	NA
Sulfur Dichloride 100%	10545-99-0	30	1	ASTM F739	NT	NA
Sulfur Monochloride 100%	10025-67-9	480	6	ASTM F739	NT	NA
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	88	3	ASTM F739	2	+
t-Butyl Methyl Ether 98%	1634-04-4	6	0	ASTM F739	NT	NA
tert-Butyl Hydroperoxide 70%	75-91-2	454	5	ASTM F739	NT	NA
Tetrachloroethylene (Perchloroethylene) 99%	127-18-4	7	0	ASTM F739	1	-
Tetrahydrofurane 99%	109-99-9	3	0	ASTM F739	3	=
Toluene 99%	108-88-3	6	0	ASTM F739	1	-
Trichloroethylene 99%	79-01-6	1	0	ASTM F739	NT	NA
Triethylamine 99%	121-44-8	35	2	ASTM F739	2	=
Trifluoroacetic Acid 99%	76-05-1	480	6	ASTM F739	4	++

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Unleaded gasoline mixture	8006-61-9	8	0	ASTM F739	1	-
Vinyl acetate 99%	108-05-4	14	1	ASTM F739	2	=
Xylene 99%	1330-20-7	17	1	ASTM F739	1	-

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