

Chemical Product	CAS #	Breakthrough time	Permeation level	Standard	Degradatio level	Rating
1,1,1-Trichloroethane 99%	71-55-6	(minutes) 56	2	ASTM F739	1	
1,1,1-McMoroethane 99%			_		_	
(HFC-134A) freon 134A 99%	811-97-2	480	6	ASTM F739	NT	NA
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	52	2	ASTM F739	1	-
1,2 - dichloroethane 99%	107-06-2	23	1	ASTM F739	1	-
1,2-Dichlorobenzene 99%	95-50-1	49	2	ASTM F739	1	-
1,2,4-Trichlorobenzene 99%	120-82-1	142	4	ASTM F739	2	+
1,3 - Dichlorobenzene 98%	541-73-1	42	2	ASTM F739	1	-
2-Butoxyethanol (Butyl Cellusolve) 99%	111-76-2	480	6	ASTM F739	4	++
2-Chlorotoluene (o-Chlorotoluene) 99%	95-49-8	36	2	ASTM F739	1	-
2-Ethoxyethanol (Cellosolve) 99%	110-80-5	480	6	ASTM F739	4	++
2-Ethoxyethyl acetate (Cellosolve Acetate) 99%	111-15-9	127	4	ASTM F739	4	++
2-Methylpentamethylenediamine 99%	15520-10-2	341	5	ASTM F739	NT	NA
2-Propanol (Isopropanol) 99%	67-63-0	480	6	ASTM F739	4	++
2,2,2-Trifluoroethanol 99%	75-89-8	480	6	ASTM F739	4	++
4-Chlorotoluene (p-Chlorotoluene) 98%	106-43-4	24	1	ASTM F739	1	-
Acetaldehyde 99%	75-07-0	39	2	ASTM F739	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	480	6	ASTM F739	4	++
Acetone 99%	67-64-1	36	2	ASTM F739	2	=
Acetonitrile 99%	75-05-8	143	4	ASTM F739	4	++
Acrylonitrile 99%	107-13-1	109	3	ASTM F739	4	++
Ammonium hydroxide solution 25%	1336-21-6	480	6	EN 16523-1:2015	NT	NA

\*not normalized result

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Ammonium hydroxide solution 29%	1336-21-6	480	6	ASTM F739	4	++
Aniline 99%	62-53-3	415	5	ASTM F739	4	++
Benzene 99%	71-43-2	21	1	ASTM F739	1	-
Butyl Acetate 99%	123-86-4	45	2	ASTM F739	3	+
Carbon disulfide 99%	75-15-0	8	0	ASTM F739	1	-
Carbon Tetrachloride 99%	56-23-5	56	2	ASTM F739	1	-
Chlorobenzene 99%	108-90-7	28	1	ASTM F739	1	-
Chloroform 99%	67-66-3	13	1	ASTM F739	1	-
Chromic Acid 50%	7738-94-5	480	6	ASTM F739	4	++
Cumene 98%	98-82-8	66	3	ASTM F739	3	++
Cyclohexane 99%	110-82-7	184	4	ASTM F739	4	++
Dichloromethane (Methylene Chloride) 99%	75-09-2	12	1	ASTM F739	1	-
Diethanolamine 97%	111-42-2	480	6	ASTM F739	4	++
Dimethylformamide 99%	68-12-2	217	4	ASTM F739	4	++
Dimethylsulfoxide 99%	67-68-5	480	6	ASTM F739	4	++
Ethanol 95%	64-17-5	480	6	ASTM F739	4	++
Ether (Diethyl Ether) 99%	60-29-7	28	1	ASTM F739	3	=
Ethyl acetate 99%	141-78-6	37	2	ASTM F739	3	+
Ethylene glycol 99%	107-21-1	480	6	ASTM F739	4	++
Ethylene oxide 99%	75-21-8	45	2	ASTM F739	NT	NA
Formaldehyde 37%	50-00-0	480	6	ASTM F739	4	++
Freon 12 99%	75-71-8	480	6	ASTM F739	NT	NA
Furfural 99%	98-01-1	258	5	ASTM F739	4	++
Hydrazine 35%	302-01-2	480	6	ASTM F739	4	++
Hydrazine 70%	302-01-2	480	6	ASTM F739	4	++
Hydrazine 98%	302-01-2	NT	NT		4	NA

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Hydrochloric acid 10%	7647-01-0	480	6	ASTM F739	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 10%	7664-39-3	480	6	ASTM F739	4	++
Hydrofluoric Acid 40%	7664-39-3	480	6	EN 16523-1:2015	3	++
Hydrofluoric Acid 49%	7664-39-3	480	6	ASTM F739	4	++
Hydrogen fluoride Anhydrous 100% Liq.	7664-39-3	240	4	EN 374-3:1994	NT	NA
Hydrogen fluoride Anhydrous 99% Gas	7664-39-3	480	6	ASTM F739	NT	NA
Hydrogen peroxide 30%	7722-84-1	480	6	EN 16523-1:2015	4	++
lodomethane (Methyl lodide) 99%	74-88-4	9	0	ASTM F739	NT	NA
Isoamyl Acetate (Isopentylacetate) 98%	123-92-2	122	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	480	6	ASTM F739	4	++
Methanol 99%	67-56-1	245	5	ASTM F739	4	++
Methyl Amyl Ketone 98%	110-43-0	52	2	ASTM F739	3	+
Methyl Ethyl Ketone (2-Butanone) 99%	78-93-3	25	1	ASTM F739	3	=
Methylisobutylketone 99%	108-10-1	63	3	ASTM F739	3	++
Mineral Spirits 100%	64475-85-0	NT	NT		4	NA
n-Heptane 99%	142-82-5	186	4	ASTM F739	4	++
n-hexane 95%	110-54-3	132	4	ASTM F739	4	++
N-methyl-2-Pyrrolidone 99%	872-50-4	226	4	ASTM F739	3	++
N-N dimethyl acetamide 30%	127-19-5	NT	NT		4	NA
N-N dimethyl acetamide 99%	127-19-5	92	3	ASTM F739	4	++
Naphtha mixture	8030-30-6	NT	NT		4	NA

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Naphtha Heavy mixture	68551-17-7	480	6	ASTM F739	NT	NA
Naphtha VM&P mixture	8032-32-4	89	3	ASTM F739	4	++
laphtha, Hydrodesulphurized Heavy mixture	64742-82-1	392	5	EN 374-3:2003	2	+
Naphtha, Hydrotreated Heavy mixture	64742-48-9	370	5	EN 374-3:2003	NT	NA
Nitric acid 10%	7697-37-2	480	6	ASTM F739	4	++
Nitric acid 20%	7697-37-2	480	6	ASTM F739	4	++
Nitric acid 40%	7697-37-2	480	6	ASTM F739	4	++
Nitric acid 50%	7697-37-2	480	6	ASTM F739	4	++
Nitric acid 65%	7697-37-2	480	6	EN 16523-1:2015	4	++
Nitric acid 68%	7697-37-2	480	6	EN 374-3:2003	3	++
Nitric acid 90%	7697-37-2	9	0	ASTM F739	NT	NA
Nitrobenzene 99%	98-95-3	132	4	ASTM F739	3	++
Oleic Acid 90%	112-80-1	NT	NT		4	NA
p-dioxane (1,4-Dioxane) 99%	123-91-1	74	3	ASTM F739	NT	NA
Pentane 99%	109-66-0	122	4	ASTM F739	4	++
Pentane isomers mixture	NA	161	4	EN 374-3:2003	NT	NA
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	++
Polychlorinated Biphenyl (PCB) (50%) in 1,2,4-Trichlorobenzene mixture	11097-69-1	161	4	ASTM F739	NT	NA
Potassium Hydroxide 50%	1310-58-3	480	6	ASTM F739	4	++
Pyridine 99%	110-86-1	36	2	ASTM F739	2	=
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	++

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Styrene 99%	100-42-5	20	1	EN 374-3:2003	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	480	6	ASTM F739	4	++
Tetrachloroethylene (Perchloroethylene) 99%	127-18-4	40	2	ASTM F739	1	-
Tetrahydrofurane 99%	109-99-9	NT	NT		1	NA
Toluene 99%	108-88-3	19	1	ASTM F739	1	-
Toluene Diisocyanate (TDI) 80%	584-84-9	480	6	ASTM F739	4	++
Trichloroethylene 99%	79-01-6	12	1	ASTM F739	1	-
Triethanolamine 98%	102-71-6	480	6	ASTM F739	4	++
Triethylamine 99%	121-44-8	133	4	ASTM F739	NT	NA
Turpentine mixture	8006-64-2	480	6	ASTM F739	4	++
Unleaded gasoline mixture	8006-61-9	41	2	ASTM F739	2	=
Vinyl acetate 99%	108-05-4	38	2	ASTM F739	4	+
Xylene 99%	1330-20-7	24	1	ASTM F739	1	-

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