

AdvanTech 514

Chemical Product	CAS #	Breakthrough time (minutes)	Permeation level	Standard	Degradation level	Rating
1,1,1-Trichloroethane 99%	71-55-6	7	0	ASTM F739	NT	NA
1,1,1,2,2,3,4,5,5,5-Decafluoropentane 97%	138495-42-8	13	1	ASTM F739	NT	NA
1,1,2-Trichlorotrifluoroethane (Freon TF or Freon 113) 99%	76-13-1	20	1	ASTM F739	1	-
1,2 Dichloroethylene 98%	156-60-5	2	0	ASTM F739	2	-
1,3 Ethoxy propionate (Ethyl 3-ethoxypropionate) 99%	763-69-9	480	6	ASTM F739	NT	NA
2-Butoxyethanol (Butyl Cellusolve) 99%	111-76-2	53	2	ASTM F739	NT	NA
2-Butoxyethylacetate (Butyl cellosolve acetate) 85%	112-07-2	35	2	ASTM F739	NT	NA
2-Ethoxyethanol (Cellosolve) 99%	110-80-5	27	1	ASTM F739	NT	NA
2-Ethoxyethyl acetate (Cellosolve Acetate) 99%	111-15-9	14	1	ASTM F739	4	+
2-Methoxyethanol (Methyl Cellosolve) 99%	109-86-4	40	2	ASTM F739	NT	NA
2-Methoxyethanol Acetate (Methyl cellosolve acetate) 98%	110-49-6	27	1	ASTM F739	NT	NA
2-Propanol (Isopropanol) 99%	67-63-0	38	2	ASTM F739	4	+
2-Propanol (Isopropanol) 99%	67-63-0	29	1	EN 374-3:2003	4	+
4,4 - diamino diphenylsulfone 97%	80-008-0	480	6	ASTM F739	NT	NA
4,4'-Methylenedianiline (MDA) 15% and 15% Methanol mixture	101-77-9	19	1	ASTM F739	NT	NA
4,4'-Methylenedianiline (MDA) 15% in Toluene mixture	101-77-9	15	1	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	32	2	ASTM F739	4	+
Acetic acid 99%	64-19-7	29	1	EN 374-3:2003	4	+
Acetone 99%	67-64-1	6	0	ASTM F739	4	=
Aluminum Etch mixture	NA	960	6	ASTM F739	4	++
Aluminum Oxide mixture	NA	55	2	ASTM F739	NT	NA

*not normalized result

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Ammonium Fluoride 40%	12125-01-8	480	6	ASTM F739	NT	NA
Ammonium Fluoride 79%	12125-01-8	480	6	ASTM F739	NT	NA
Ammonium hydroxide solution 29%	1336-21-6	36	2	ASTM F739	4	+
Ammonium hydroxide solution 29%	1336-21-6	19	1	EN 374-3:2003	4	+
Baker PRS-1000 mixture	NA	20	1	ASTM F739	NT	NA
Baker PRS-2000 mixture	NA	130	4	ASTM F739	NT	NA
Baker PRS-3000 mixture	NA	480	6	ASTM F739	NT	NA
Benzene 99%	71-43-2	4	0	ASTM F739	1	-
Buffered Oxide Etch mixture	NA	480	6	ASTM F739	4	++
Butyl Acetate 99%	123-86-4	7	0	ASTM F739	4	=
Butyl Acetate 99%	123-86-4	5	0	EN 374-3:2003	4	=
Chromic Acid 50%	7738-94-5	60	2	ASTM F739	NT	NA
Cyclohexanone 99%	108-94-1	23	1	ASTM F739	1	-
Cyclopentanone 99%	120-92-3	11	1	ASTM F739	NT	NA
Dichloromethane (Methylene Chloride) 99%	75-09-2	4	0	ASTM F739	NT	NA
Dichromate cleaning solution mixture	NA	480	6	ASTM F739	4	++
Diethylamine 98%	109-89-7	4	0	ASTM F739	NT	NA
Diglycidyl ether of bisphenol 100%	25068-38-6	480	6	ASTM F739	NT	NA
Dimethylamine 35%	124-40-3	53	2	ASTM F739	NT	NA
Dimethylformamide 99%	68-12-2	8	0	ASTM F739	NT	NA
Dimethylsulfoxide 99%	67-68-5	181	4	ASTM F739	4	++
Epichlorohydrin 99%	106-89-8	4	0	ASTM F739	NT	NA
Ethanol 95%	64-17-5	21	1	ASTM F739	NT	NA
Ethyl lactate 95%	97-64-3	29	1	ASTM F739	NT	NA
Ethylene glycol 99%	107-21-1	480	6	ASTM F739	4	++

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Formaldehyde 37%	50-00-0	480	6	EN 16523-1:2015	4	++
Hexamethyldisilazane (HMDS) 98%	999-97-3	18	1	ASTM F739	1	-
Hydrochloric acid 10%	7647-01-0	480	6	EN 374-3:2003	4	++
Hydrochloric acid 35%	7647-01-0	NT	NT		4	NA
Hydrochloric acid 37%	7647-01-0	454	5	ASTM F739	4	++
Hydrofluoric Acid 10%	7664-39-3	480	6	EN 374-3:2003	4	++
Hydrofluoric Acid 40%	7664-39-3	480	6	EN 16523-1:2015	NT	NA
Hydrofluoric Acid 49%	7664-39-3	390	5	ASTM F739	NT	NA
Hydrofluoric Acid 49%	7664-39-3	480	6	EN 374-3:2003	NT	NA
Hydrogen peroxide 30%	7722-84-1	960	6	ASTM F739	4	++
Hydrogen peroxide 30%	7722-84-1	480	6	EN 16523-1:2015	4	++
Hydrotreated Light Naphthenic Distillate mixture	64742-53-6	161	4	ASTM F739	2	+
Kerosene mixture	8008-20-6	26	1	ASTM F739	1	-
KOH Etch mixture	NA	278	5	ASTM F739	4	++
KTI Pad Etch mixture	NA	480	6	ASTM F739	NT	NA
KTI Silicon Etch mixture	NA	480	6	ASTM F739	NT	NA
Methanesulfonic Acid 99%	75-75-2	NT	NT		4	NA
Methanol 85%	67-56-1	19	1	ASTM F739	4	+
Methanol 99%	67-56-1	NT	NT		4	NA
Methyl Amyl Ketone 98%	110-43-0	8	0	ASTM F739	1	-
Methyl Ethyl Ketone (2-Butanone) 99%	78-93-3	4	0	ASTM F739	3	=
Methyl-3-methoxypropionate 100%	3852-09-3	11	1	ASTM F739	3	=
n-hexane 95%	110-54-3	3	0	ASTM F739	1	-
N-methyl-2-Pyrrolidone 99%	872-50-4	50	2	ASTM F739	4	+
N-methyl-2-Pyrrolidone 99%	872-50-4	33	2	EN 374-3:2003	4	+

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N-N dimethyl acetamide 99%	127-19-5	47	2	ASTM F739	NT	NA
Naphtha VM&P mixture	8032-32-4	2	0	ASTM F739	1	-
Nitric acid 10%	7697-37-2	840	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	NT	NT		4	NA
Nitric acid 68%	7697-37-2	299	5	EN 374-3:2003	4	++
Nitric acid 70%	7697-37-2	307	5	ASTM F739	4	++
Nitric acid 90%	7697-37-2	7	0	ASTM F739	NT	NA
Nitride Etch mixture	NA	NT	NT		4	NA
Nitrohydrochloric acid (Aqua Regia) mixture	8007-56-5	480	6	ASTM F739	NT	NA
Phenol 85%	108-95-2	102	3	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	++
Phosphorus Oxychloride 99%	10025-87-3	15	1	ASTM F739	NT	NA
Piranha Etch mixture	NA	243	5	ASTM F739	1	-
Polyethylene glycol octylphenyl ether 100%	9002-93-1	480	6	ASTM F739	NT	NA
Potassium Hydroxide 50%	1310-58-3	480	6	ASTM F739	4	++
Potassium Hydroxide Etch mixture	NA	24	1	ASTM F739	NT	NA
Propylene Glycol 99%	57-55-6	480	6	ASTM F739	4	++
Propylene Glycol Methyl Ethyl Acetate (PGMEA) 99%	108-65-6	47	2	ASTM F739	3	+
Propylene Glycol Monomethyl Ether 99%	107-98-2	26	1	ASTM F739	4	+
Silicon Tetrachloride 100%	10026-04-7	15	1	ASTM F739	NT	NA
Slope Etch mixture	NA	260	5	ASTM F739	4	++
Sodium hydroxide 20%	1310-73-2	780	6	ASTM F739	4	++

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Sodium hydroxide 40%	1310-73-2	780	6	ASTM F739	4	++
Sodium hydroxide 40%	1310-73-2	480	6	EN 16523-1:2015	4	++
Sodium hydroxide 50%	1310-73-2	780	6	ASTM F739	4	++
Sodium hydroxide 50%	1310-73-2	480	6	EN 16523-1:2015	4	++
Sulfuric acid 10%	7664-93-9	900	6	ASTM F739	4	++
Sulfuric acid 96%	7664-93-9	102	3	ASTM F739	3	++
Sulfuric acid 96%	7664-93-9	41	2	EN 374-3:2003	3	+
Tetrachloroethylene (Perchloroethylene) 99%	127-18-4	4	0	ASTM F739	1	-
Tetrachloroethylene (Perchloroethylene) 99%	127-18-4	3	0	EN 374-3:2003	1	-
Tetraethyl Orthosilicate 100%	78-10-4	25	1	ASTM F739	1	-
Tetramethyl Ammonium Hydroxide 25%	75-59-2	480	6	ASTM F739	4	++
Thionylchloride 99%	7719-09-7	15	1	ASTM F739	NT	NA
Toluene 49% Methyl Isobutyl Ketone 34.5% Methyl Ethyl Ketone 16.5% mixture	NA	1	0	EN 374-3:2003	NT	NA
Toluene Diisocyanate (TDI) 80%	584-84-9	27	1	ASTM F739	NT	NA
Trichloroethylene 99%	79-01-6	NT	NT		1	NA
Trimethylphosphite 97%	121-45-9	10	0	ASTM F739	NT	NA
Unleaded gasoline mixture	8006-61-9	4	0	ASTM F739	1	-
Xylene 99%	1330-20-7	4	0	ASTM F739	1	-
Xylene 99%	1330-20-7	3	0	EN 374-3:2003	1	-

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