



Chemical Testing Results  
MICROCHEM® 3000

ACRONYMS KEY

—	Not reported
MDPR	Minimum detectable permeation rate
BDT	Breakthrough detection time (first appearance after the MDP)
BT 0.1	Normalised breakthrough detection time at 0.1 µg/cm <sup>2</sup> /min
BT 1.0	Normalised breakthrough detection time at 1.0 µg/cm <sup>2</sup> /min
EN Class	Based on the mean BT (or lowest if the mean is not available) at 1.0µg/cm <sup>2</sup> /min according to ISO 6529
CP	Cumulative permeation after 480 min. If no permeation detected, then reported as <[MDPR x 480]
CPT	Time to cumulative permeation of 150 µg/cm <sup>2</sup>
PR	Steady state permeation rate. If not reached then maximum permeation rate for the duration of the test is reported. If no permeation is detected then reported as <MDPR

EN Class	Normalised Breakthrough Time in minutes
0	Immediate (no class)
1	≥ 10
2	≥ 30
3	≥ 60
4	≥ 120
5	≥ 240
6	≥ 480 (or >540)

CAS Number	Chemical Name	MDPR µg/cm <sup>2</sup> /min	BDT	BT 0.1µg/cm <sup>2</sup> /min	BT 1.0µg/cm <sup>2</sup> /min	EN Class EN 14325	CP µg/cm <sup>2</sup>	CPT µg/cm <sup>2</sup> /min	CP Class	PR µg/cm <sup>2</sup> /min
64-19-7	Acetic Acid (glacial. 99.88% w/w)	≤0.05	-	-	>480	6	-	-	-	<1.0
108-24-7	Acetic Anhydride	≤0.05	-	-	>480	6	-	-	-	<1.0
67-64-1	Acetone	≤0.08	4	4	30	1	-	-	-	-
75-05-8	Acetonitrile	≤0.08	Imm	Imm	7	0	-	-	-	-
79-06-1	Acrylamide	-	-	-	>480	6	-	-	-	<1.0
79-10-7	Acrylic Acid	-	-	-	>480	6	-	-	-	<1.0
7664-41-7	Ammonia Gas (>99.98% w/w. 1 atmos.)	≤0.05	Imm	1	3	0	-	-	-	-
1341-49-7	Ammonium Hydrogen Fluoride	-	-	-	>480	6	-	-	-	<1.0
62-53-3	Aniline	-	-	-	>480	6	-	-	-	<1.0
17804-35-2	Benlate®	-	-	-	>480	6	-	-	-	<1.0
71-43-2	Benzene	-	-	-	2	0	-	-	-	-
98-09-9	Benzene Sulphonyl Chloride (99%)	-	-	-	>480	6	-	-	-	<1.0
100-44-7	Benzyl Chloride	-	-	-	16	1	-	-	-	-
7726-95-6	Bromine	-	-	-	2	0	-	-	-	-
71-36-3	Butanol n-	-	-	-	>480	6	-	-	-	<1.0
141-32-2	Butyl Acrylate n-	-	-	-	16	1	-	-	-	-
75-15-0	Carbon Disulphide	-	-	Imm	Imm	0	-	-	-	-
7782-50-5	Chlorine (liquid. satd.. 99.9+%)	-	-	-	2	0	-	-	-	-
7782-50-5	Chlorine Gas (>99.8% w/w. 1 atmos.)	≤0.05	9	9	10	0	-	-	-	-
79-11-8	Chloroacetic Acid (79% w/w)	0.076	>480	>480	>480	6	<37	>480	6	<0.076
79-04-9	Chloroacetyl Chloride	-	-	-	36	2	-	-	-	-
107-07-3	Chloroethanol. 2- (99%)	-	-	-	>480	6	-	-	-	<1.0
67-66-3	Chloroform	-	-	-	Imm	0	-	-	-	-
1333-82-0	Chromium Trioxide (50% w/w)	0.09	>480	>480	>480	6	<43.2	>480	6	<0.09
1319-77-3	Cresols. mixed	<1.0	-	-	>480	6	-	-	-	<1.0
107-06-2	Dichloroethane. 1,2-	-	-	-	4	0	-	-	-	-
156-60-5	Dichloroethylene. trans-1,2-	-	-	-	2	0	-	-	-	-
75-09-2	Dichloromethane (99.99% w/w)	≤0.08	Imm	Imm	Imm	0	-	-	-	-
68334-30-5	Diesel	-	-	-	15	1	-	-	-	-
60-29-7	Diethyl Ether	-	-	-	Imm	0	-	-	-	-
109-89-7	Diethylamine (99.9% w/w)	≤0.08	Imm	Imm	Imm	0	-	-	-	-
367-25-9	Difluoroaniline. 2,4-	-	-	-	>480	6	-	-	-	<1.0
77-78-1	Dimethyl Sulphate	-	-	-	>480	6	-	-	-	<1.0
124-40-3	Dimethylamine (40% w/w)	-	-	-	>480	6	-	-	-	<1.0
5683-33-0	Dimethylaminopyridine. 2- (99+%)	-	-	-	57	2	-	-	-	-
68-12-2	Dimethylformamide. N,N-	-	-	-	>480	6	-	-	-	<1.0
106-89-8	Epichlorohydrin (99%)	-	-	-	>480	6	-	-	-	<1.0
141-43-5	Ethanolamine (99.8 wt%)	0.07	>480	>480	>480	6	<33.6	>480	6	<0.07
141-78-6	Ethyl Acetate (99.98% w/w)	≤0.08	Imm	Imm	Imm	0	-	-	-	-
107-21-1	Ethylene Glycol	-	-	-	>480	6	-	-	-	<1.0
149-57-5	Ethylhexanoic Acid. 2-	-	-	-	>480	6	-	-	-	<1.0
N/A	Farm Fluid S	<1.0	-	-	>360	5	-	-	-	<1.0
7705-08-0	Ferric Chloride (45%)	0.03	>480	>480	>480	6	<14.4	>480	6	<0.03
50-00-0	Formaldehyde (37%)	-	-	-	>480	6	-	-	-	<1.0
64-18-6	Formic Acid (90%)	-	-	-	>480	6	-	-	-	<1.0
98-01-1	Furfural	-	-	-	>480	6	-	-	-	<1.0
1310-58-3	Gardoclean S 5174 (Analysis of potassium hydroxide component)	0.04	>480	>480	>480	6	<19.2	>480	6	<0.04
142-82-5	Heptane. n- (99.8% w/w)	≤0.08	Imm	Imm	Imm	0	-	-	-	-
124-09-4	Hexamethylene Diamine. 1,6-	-	-	-	>480	6	-	-	-	<1.0
822-06-0	Hexamethylene Diisocyanate	<0.1	-	>480	>480	6	<48	>480	6	<0.1
110-54-3	Hexane. n-	0.09	Imm	Imm	Imm	0	-	-	-	-
7803-57-8	Hydrazine monohydrate (98%. containing hydrazine. 64-65% w/w)	<1.0	>480	-	>480	6	-	-	-	<1.0
10035-10-6	Hydrobromic Acid	-	-	-	>480	6	-	-	-	<1.0
7647-01-0	Hydrochloric Acid (36-37% w/w)	0.05	14	193	>480	6	-	>480	6	<1.0
7664-39-3	Hydrofluoric Acid (49 wt%)	0.06	378	407	>480	6	33.7	>480	5	0.17
7664-39-3	Hydrofluoric Acid (62-64% in urea)	-	-	-	41	2	-	-	-	-
7647-01-0	Hydrogen Chloride Gas (>99.0% w/w. 1 atmos.)	≤0.05	Imm	Imm	8	0	-	-	-	-
74-90-8	Hydrogen Cyanide	0.01	3	<3	<3	0	-	-	-	>1.0
7722-84-1	Hydrogen Peroxide (35%)	-	-	-	>480	6	-	-	-	<1.0

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Menu

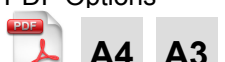
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7553-56-2	Iodine	-	-	-	>480	6	-	-	-	<1.0
67-63-0	Isopropyl Alcohol	-	-	-	>480	6	-	-	-	<1.0
7439-97-6	Mercury	0.05	>480	>480	>480	6	<24.0	>480	6	<0.05
67-56-1	Methanol (>99.5% w/w)	0.05	imm	1	>480	6	-	364	5	0.59
625-45-6	Methoxyacetic Acid, 2-	-	-	-	>480	6	-	-	-	<1.0
74-88-4	Methyl Iodide	-	-	-	>480	6	-	-	-	<1.0
872-50-4	Methyl-2-pyrrolidone, N-	-	-	-	>480	6	-	-	-	<1.0
7697-37-2	Nitric Acid (Conc., 70% w/w)	0.03	>480	>480	>480	6	<14.4	>480	6	<0.03
98-95-3	Nitrobenzene (99.99% w/w)	-	-	-	>480	6	-	-	-	<1.0
75747-77-2	Octave®	-	-	-	>480	6	-	-	-	<1.0
144-62-7	Oxalic Acid (10%)	0.06	>480	>480	>480	6	NR	>480	6	<0.06
64-17-5	Oxilan 9810 (Analysis of ethanol component)	0.01	>480	>480	>480	6	<4.80	>480	6	<0.01
N/A	Oxilan Additive 9905 (Mixture)	0.09	>480	>480	>480	6	<43.2	>480	6	<0.09
92062-35-6	Paraffin	-	-	-	25	1	-	-	-	-
7601-90-3	Perchloric Acid (30% w/w)	≤0.05	>480	>480	>480	6	-	-	-	≤0.05
8006-61-9	Petrol (unleaded)	-	-	-	2	0	-	-	-	-
108-95-2	Phenol (Liquid, 45 °C)	0.01	<1	<1	4	0	-	152	4	2.75
108-95-2	Phenol (liquified, approx. 90% w/w with water)	0.021	>480	>480	>480	6	<10.0	>480	6	<0.021
108-95-2 (in	Phenol/Benzyl Alcohol 25/5	-	-	-	>480	6	-	-	-	<1.0
7664-38-2	Phosphoric Acid (85+%)	0.05	>480	>480	>480	6	<24.0	>480	6	<0.05
10025-87-3	Phosphorus Oxchloride	-	-	-	9	0	-	-	-	-
10026-13-8	Phosphorus Pentachloride	-	-	-	>480	6	-	-	-	<1.0
85-44-9	Phthalic Anhydride (135 °C)	-	-	-	>480	6	-	-	-	<1.0
N/A	Piranha solution (sulphuric acid 96% w/w:hydrogen peroxide 30% w/w)	0.02	<1	1	>480	6	-	-	-	-
75-98-9	Pivalic Acid	-	-	-	>480	6	-	-	-	<1.0
25322-68-3	Polyethylene Glycol 200	-	-	-	>480	6	-	-	-	<1.0
1310-58-3	Potassium Hydroxide (30%)	0.04	>480	>480	>480	6	<19.2	>480	6	<0.04
1310-58-3	Potassium Hydroxide (aq., 80-86% w/v)	0.04	>480	>480	>480	6	<19.2	>480	6	<0.04
123-38-6	Propionaldehyde	-	-	-	70	3	-	-	-	-
85-00-7	Realone®	-	-	-	>480	6	-	-	-	<1.0
52315-07-8	Riccord®	-	-	-	>480	6	-	-	-	<1.0
38641-94-0	Roundup®	-	-	-	>480	6	-	-	-	<1.0
7681-38-1	Sodium Bisulphate (40%)	-	-	-	>480	6	-	-	-	<1.0
7647-14-5	Sodium Chloride	-	-	-	>480	6	-	-	-	<1.0
143-33-9	Sodium Cyanide (satd. soln.)	-	-	-	>480	6	-	-	-	<1.0
7681-49-4	Sodium Fluoride (satd.)	-	-	-	>480	6	-	-	-	<1.0
1310-73-2	Sodium Hydroxide (aq., 40% w/w)	0.068	>480	>480	>480	6	<32.6	>480	6	<0.068
1310-73-2	Sodium Hydroxide (aq., 50% w/w, 80 °C)	0.031	>480	>480	>480	6	<26.0	>480	6	<0.031
1310-73-2	Sodium Hydroxide (aq., 50% w/w)	0.068	>480	>480	>480	6	<33	>480	6	<0.068
7681-52-9	Sodium Hypochlorite Solution (aq., 14.5 wt% available chlorine)	0.041	>480	>480	>480	6	<19.7	>480	6	<0.041
7681-52-9	Sodium Hypochlorite Solution (aq., 5% available chlorine)	0.041	>480	>480	>480	6	<19.7	>480	6	<0.041
124-41-4	Sodium Methsulfate (30%)	-	-	-	>480	6	-	-	-	<1.0
16893-85-9	Sodium Silicofluoride (satd.)	-	-	-	>480	6	-	-	-	<1.0
100-42-5	Styrene	0.04	<1	<1	<1	0	-	3	0	199
7664-93-9	Sulphuric Acid (50% w/w, 80 °C)	0.021	>480	>480	>480	6	<10.0	>480	6	<0.021
7664-93-9	Sulphuric Acid (95-96% w/w)	0.051	>480	>480	>480	6	<24.5	>480	6	<0.051
7664-93-9	Sulphuric Acid (98+%)	<0.1	-	-	>480	6	-	-	-	<1.0
306-83-2	SUVA HCFC-123 (1,1-Dichloro-2,2,2-trifluoroethane)	-	-	-	251	5	-	-	-	-
1634-04-4	t-Butyl Methyl Ether	<0.1	-	-	1	0	-	-	-	-
109-99-9	Tetrahydrofuran	≤0.08	Imm	Imm	Imm	0	-	-	-	-
7719-09-07	Thionyl Chloride	-	-	-	Imm	0	-	-	-	-
1758-73-2	Thiourea Dioxide (satd.)	-	-	-	>480	6	-	-	-	<1.0
7550-45-0	Titanium Tetrachloride	0.02	<1	<1	7	0	-	35	2	11.1
108-88-3	Toluene	≤0.08	Imm	Imm	Imm	0	-	-	-	-
584-84-9	Toluene-2,4-diisocyanate	-	-	-	>480	6	-	-	-	<1.0
95-53-4	Toluidine, o-	-	-	-	>480	6	-	-	-	<1.0
76-03-9	Trichloroacetic Acid (98%)	-	-	-	>480	6	-	-	-	<1.0
79-01-6	Trichloroethylene	-	-	-	2	0	-	-	-	-
121-44-8	Triethylamine	-	-	-	Imm	0	-	-	-	-

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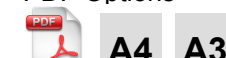
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CPT	Time to cumulative permeation of 150 µg/cm <sup>2</sup>
PR	Steady state permeation rate. If not reached then maximum permeation rate for the duration of the test is reported. If no permeation is detected then reported as <MDPR

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76-05-1	Trifluoroacetic Acid (99.0 wt%)	-	-	-	>480	6	-	-	-	<1.0
2177-18-6	Vinyl Acrylate	-	-	-	3	0	-	-	-	-
1330-20-7	Xylene, m-	-	-	-	2	0	-	-	-	-
106-42-3	Xylene, p-	0.01	Imm	Imm	Imm	0	NR	Imm	0	218
7699-45-8	Zinc Bromide (satd. soln.)	-	-	-	>480	6	-	-	-	<1.0

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