MICROCHEM® 3000

Chemical Testing Results

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BDT	Breakthrough detection time (first appearance after the MDPR)
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EN Class	Based on the mean BT (or lowest if the mean is not available) at 1.0µg/cm2/min according to ISO 6529
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CPT	Time to cumulative permeation of 150 µg/cm²
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1	≥ 10
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6	≥ 480 (or >540)

CAS Number	Chemical Name	MDPR µg/cm²/min	BDT	BT 0.1µg/cm²/min	BT 1.0µg/cm²/min	EN Class EN 14325	CP µg/cm²	CPT µg/cm²/min	CP Class	PR µg/cm²/min
108-24-7	Acetic Anhydride	≤0.05	-		>480	6	-	-	-	<1.0
67-64-1	Acetone	≤0.08	4	4	28	1	-	-	-	-
75-05-8	Acetonitrile	≤0.08	Imm	Imm	<6	0	-	-	-	-
79-06-1	Acrylamide	-	-		>480	6	-	-	-	<1.0
79-10-7	Acrylic Acid	-	-		>480	6	-	-	-	<1.0
107-18-6	Allyl Alcohol	0.02	7	77	>480	6	51.2	>480	6	0.13
7664-41-7	Ammonia (Gas, 1 atmos.)	≤0.05	Imm	1	3	0	-	-	-	-
1341-49-7	Ammonium Hydrogen Fluoride (Saturated)	0.06	>480	>480	>480	6	<28.8	>480	6	<0.06
1336-21-6	Ammonium Hydroxide (20% w/w)	0.05	<6	<6	>480	6	64	>480	6	0.56
1336-21-6	Ammonium Hydroxide (25% w/w)	0.05	<6	<6	>480	6	79	>480	6	-
17804-35-2	Benlate®	-	-		>480	6	-	-	-	<1.0
71-43-2	Benzene	-	-		2	0	-	-	-	-
98-09-9	Benzene Sulphonyl Chloride	-	-		>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 (Gas, 1 atmos.)	≤0.05	9	9	10	1	-	-	-	-
7782-50-5	Chlorine Water (satd.)	-	-		2	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-	-	-		>480	6	-	-	-	<1.0
67-66-3	Chloroform	-	-		Imm	0	-	-	-	-
107-94-8	Chloropropionic Acid, 3- (Liquid, 50 °C / 122 °F)	0.02	10	37	>480	6	237	318	5	0.6
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 (Methylene Chloride)	≤0.08	Imm	Imm	Imm	0	-	-	-	-
68334-30-5	Diesel	-	-		15	1	-	-	-	-
60-29-7	Diethyl Ether	-	-		Imm	0	-	-	-	-
109-89-7	Diethylamine	≤0.08	Imm	Imm	Imm	0	-	-	-	-
367-25-9	Difluoroaniline, 2.4-	-	-		>480	6	-	-	-	<1.0
624-49-7	Dimethyl Fumarate	0.05	>480	>480	>480	6	<24	>480	6	<0.05
77-78-1	Dimethyl Sulphate (DMA)	-	-		>480	6	-	-	-	<1.0
124-40-3	Dimethylamine (40% w/w)	-	-		>480	6	-	-	-	<1.0
5683-33-0	Dimethylaminopyridine, 2-	-	-		57	2	-	-	-	-
68-12-2	Dimethylformamide, N,N-	-	-		>480	6	-	-	-	<1.0
106-89-8	Epichlorohydrin	0.05	-	12	>480	6	-	-	-	0.8
75-08-1	Ethanethiol	0.05	<1	<1	1	0	ND	ND	ND	High
141-43-5	Ethanolamine	0.07	>480	>480	>480	6	<33.6	>480	6	<0.07
141-78-6	Ethyl Acetate	≤0.08	Imm	Imm	3	0	-	-	-	-
107-21-1	Ethylene Glycol	-	-		>480	6	-	-	-	<1.0
149-57-5	Ethylhexanoic Acid, 2-	-	-		>480	6	-	-	-	<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
64-18-6	Formic Acid (98% w/w)	0.02	>480	>480	>480	6	<9.6	>480	6	<0.02
98-01-1	Furfural	-	-		>480	6	-	-	-	<1.0
Mixture	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-	≤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 (48% w/w)	-	-		>480	6	-	-	-	<1.0
7664-39-3	Hydrofluoric Acid (49% w/w)	0.06	378	407	>480	6	33.7	>480	6	0.17

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7664-39-3	Hydrofluoric Acid (62-64% in urea)	-	-		41	2	-	-	-	-
7664-39-3	Hydrofluoric Acid (71-75% w/w)	0.03	2	13	273	5	NR	264	5	1.48
7647-01-0	Hydrogen Chloride (Gas, 1 atmos.)	≤0.05	Imm	Imm	8	0	-	-	-	-
74-90-8	Hydrogen Cyanide (HCN)	0.01	3	<3	<3	0	-	113	3	>1.0
7722-84-1	Hydrogen Peroxide (35% w/w)	-	-		>480	6	-	-	-	<1.0
7722-84-1	Hydrogen Peroxide (50% w/w)	-	-		>480	6	-	-	-	<1.0
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	>480	6	<0.05
67-56-1	Methanol	0.05	imm	4	>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
98-95-3	Nitrobenzene	0.05	41	48	>480	6	-	-	-	-
75747-77-2	Octave®	-	-		>480	6	-	-	-	<1.0
8014-95-7	Oleum (20% w/w Sulphur Trioxide)	0.05	8	16	60	3	29 (70 min)	70 (29 µg)	3	High
8014-95-7	Oleum (30% w/w Sulphur Trioxide)	0.05	<6	7	21	1	21 (28 min)	28 (21 µg)	1	High
144-62-7	Oxalic Acid (10%)	0.06	>480	>480	>480	6	-	>480	6	<0.06
Mixture	Oxsilan 9810 (Analysis of ethanol component)	0.01	>480	>480	>480	6	<4.8	>480	6	<0.01
N/A	Oxsilan 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 / 113 °F)	0.01	Imm	Imm	4	0	-	152	4	2.75
108-95-2	Phenol (liquified, approx. 90% w/w with water)	0.021	>480	>480	>480	6	<10	>480	6	<0.021
Mixture	Phenol/Benzyl Alcohol 25:5	-	-		>480	6	-	-	-	<1.0
7664-38-2	Phosphoric Acid (≥85% w/w)	0.05	>480	>480	>480	6	<24	>480	6	<0.05
10025-87-3	Phosphorus Oxychloride	-	-		9	0	-	-	-	-
10026-13-8	Phosphorus Pentachloride	-	-		>480	6	-	-	-	<1.0
85-44-9	Phthalic Anhydride (Liquid, 135 °C / 275 °F)	-	-		>480	6	-	-	-	<1.0
Mixture	Piranha solution (sulphuric acid 96% w/w:hydrogen peroxide 30% w/w,	0.02	Imm	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 (80-86% w/v)	0.04	>480	>480	>480	6	<19.2	>480	6	<0.04
123-38-6	Propionaldehyde	0.05	<1	<1	2	0	-	33	2	-
110-86-1	Pyridine	0.05	7	8	17	1	N.D	N.D	-	>2
85-00-7	Reglone®	-	-		>480	6	-	-	-	<1.0
52315-07-8	Ripcord®	-	-		>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.)	-	-		>480	6	-	-	-	<1.0
7681-49-4	Sodium Fluoride (satd.)	-	-		>480	6	-	-	-	<1.0
1310-73-2	Sodium Hydroxide (40% w/w)	0.068	>480	>480	>480	6	<32.6	>480	6	<0.068
1310-73-2	Sodium Hydroxide (50% w/w, 80 °C / 176 °F)	0.031	>480	>480	>480	6	<26	>480	6	<0.031
1310-73-2	Sodium Hydroxide (50% w/w)	0.068	>480	>480	>480	6	<33	>480	6	<0.068
7681-52-9	Sodium Hypochlorite Solution (14.5% available chlorine)	0.041	>480	>480	>480	6	<19.7	>480	6	<0.041
7681-52-9	Sodium Hypochlorite Solution (5% available chlorine)	0.041	>480	>480	>480	6	<19.7	>480	6	<0.041
124-41-4	Sodium Methylate (30%)	-	-		>480	6	-	-	-	<1.0
16893-85-9	Sodium Silicofluoride (satd.)	-	-		>480	6	-	-	-	<1.0
100-42-5	Styrene	0.04	Imm	Imm	Imm	0	-	3	0	199
7664-93-9	Sulphuric Acid (≥98% w/w)	<0.1	-		>480	6	-	-	-	<0.1
7664-93-9	Sulphuric Acid (50% w/w, 80 °C / 176 °F)	0.021	>480	>480	>480	6	<10	>480	6	<0.021
7664-93-9	Sulphuric Acid (95-96% w/w)	≤0.05	>480	>480	>480	6	<24.5	>480	6	<0.05
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	-	-	-	-

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75-59-2	Tetramethylammonium Hydroxide (20% w/w)	0.07	>480	>480	>480	6	<33.6	>480	6	<0.07
7719-09-7	Thionyl Chloride	-	-		Imm	0	-	-	-	-
1758-73-2	Thiourea Dioxide (satd.)	-	-		>480	6	-	-	-	<1.0
7550-45-0	Titanium Tetrachloride	0.02	Imm	Imm	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 (59 °C / 138 °F)	-	-		>480	6	-	-	-	<1.0
79-01-6	Trichloroethylene	-	-		2	0	-	-	-	
121-44-8	Triethylamine	-	-		Imm	0	-	-	-	
76-05-1	Trifluoroacetic Acid	-	-		>480	6	-	-	-	<1.0
2177-18-6	Vinyl Acrylate	-	-		3	0	-	-	-	-
108-38-3	Xylene, m-	-	-		2	0	-	-	-	
106-42-3	Xylene, p-	0.01	Imm	Imm	Imm	0	-	<3	0	218
7699-45-8	Zinc Bromide (satd.)	-	-		>480	6	-	-	-	<1.0

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