

TECHNICAL DATA SHEET



PRODUCT INFORMATION

DuPont™ Tychem® 6000 F CHA5. Durable yet lightweight protection against a wide range of toxic industrial chemicals, particulates, and biohazards in a grey hooded coverall. Features stitched and over-taped seams, a respirator fit two-piece hood, elasticated wrists, ankles, face and waist, thumb loops, a pin lock slider zipper pull, and double storm flaps with an adhesive outer flap and chin flap. Suitable for a variety of applications, including chemical spill clean-up, emergency response, military and petrochemical operations.

ATTRIBUTES

Full Part Number	TFCHA5TGY00
Fabric/Materials	Tychem® F
Design	Hooded coverall with elastics and thumb loops
Seam	Stitched and over-taped
Color	Grey
Other Colors	Orange
Sizes	SM, MD, LG, XL, 2X, 3X
Quantity/Box	25 per box, individually packed.

FEATURES

- Certified according to Regulation (EU) 2016/425.
- Chemical protective clothing, Category III, Type 3-B, 4-B, 5-B and 6-B.
- EN 14126 (barrier to infective agents), EN 1073-2 (protection against radioactive contamination)..
- Antistatic treatment (EN 1149-5) - on inside
- Stitched and over-taped seams with barrier tape for protection and strength
- Self-adhesive double zipper flap closure system for higher protection
- Option: Socks attached to the ankle: to be worn inside safety boots or shoes with additional knee-length boot flap to ensure a high protection level

SIZETABLE

PRODUCT SIZE	ARTICLE NUMBER	ADDITIONAL INFO
SM	D13495186	
MD	D13495156	
LG	D13395221	
XL	D13395545	
2X	D13395268	
3X	D13495118	

PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	TYPICAL RESULT	EN
Abrasion Resistance ⁷	EN 530 Method 2	>2000 cycles	6/6 ¹
Basis Weight	DIN EN ISO 536	120 g/m ²	N/A
Bursting Strength (Mullenburst)	ISO 2758	650 kPa	N/A
Colour	N/A.	Grey	N/A

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PROPERTY	TEST METHOD	TYPICAL RESULT	EN
Flex Cracking Resistance ⁷	EN ISO 7854 Method B	>1000 cycles	1/6 ¹
Puncture Resistance	EN 863	>10 N	2/6 ¹
Resistance to water penetration	AATCC 127	>30 kPa	N/A
Surface Resistance at RH 25%, inside ⁷	EN 1149-1	< 2,5 · 10 ⁹ Ohm	N/A
Surface Resistance at RH 25%, outside ⁷	EN 1149-1	No antistatic treatment	N/A
Tensile Strength (MD)	DIN EN ISO 13934-1	>100 N	3/6 ¹
Tensile Strength (XD)	DIN EN ISO 13934-1	>100 N	3/6 ¹
Thickness	DIN EN ISO 534	220 µm	N/A
Trapezoidal Tear Resistance (MD)	EN ISO 9073-4	>20 N	2/6 ¹
Trapezoidal Tear Resistance (XD)	EN ISO 9073-4	>20 N	2/6 ¹

1 According to EN 14325 | 2 According to EN 14126 | 3 According to EN 1073-2 | 4 According to EN ISO 14116 | 12 According to EN ISO 11612 |

5 Front Tyvek ® / Back | 6 Based on test according to ASTM D-572 | 7 See Instructions for Use for further information, limitations and warnings | > Larger than |
< Smaller than | <= Smaller than or equal to | N/A Not Applicable | STD DEV Standard Deviation |

GARMENT PERFORMANCE

PROPERTY	TEST METHOD	TYPICAL RESULT	EN
Type 3: Resistance to Penetration by Liquids (Jet Test).	EN 17491-3	Pass	N/A
Type 4: Resistance to Penetration by Liquids (High Level Spray Test).	EN ISO 17491-4, Method B	Pass	N/A
Type 5: Inward Leakage of Airborne Solid Particulates	EN ISO 13982-2	Pass	N/A
Type 6: Resistance to Penetration by Liquids (Low Level Spray Test)	EN ISO 17491-4, Method A	Pass	N/A
Nominal protection factor ⁷	EN 1073-2	>5	1/3 ³
Shelf Life ⁷	N/A.	10 years ⁶	N/A
Seam Strength	EN ISO 13935-2	>125 N	4/6 ¹

1 According to EN 14325 | 3 According to EN 1073-2 | 12 According to EN ISO 11612 | 13 According to EN 11611 | 5 Front Tyvek ® / Back |

6 Based on test according to ASTM D-572 | 7 See Instructions for Use for further information, limitations and warnings |

11 Based on the average of 10 suits, 3 activities, 3 probes | > Larger than | < Smaller than | <= Smaller than or equal to | N/A Not Applicable |

* Based on lowest single value |

PENETRATION AND REPELLENCY

PROPERTY	TEST METHOD	TYPICAL RESULT	EN
Repellency to Liquids, o-Xylene	EN ISO 6530	>95 %	3/3 ¹
Repellency to Liquids, Butan-1-ol	EN ISO 6530	>95 %	3/3 ¹
Repellency to Liquids, Sodium Hydroxide (10%)	EN ISO 6530	>95 %	3/3 ¹
Repellency to Liquids, Sulphuric Acid (30%)	EN ISO 6530	>95 %	3/3 ¹
Resistance to Penetration by Liquids, Butan-1-ol	EN ISO 6530	<1 %	3/3 ¹
Resistance to Penetration by Liquids, o-Xylene	EN ISO 6530	<1 %	3/3 ¹
Resistance to Penetration by Liquids, Sodium Hydroxide (10%)	EN ISO 6530	<1 %	3/3 ¹
Resistance to Penetration by Liquids, Sulphuric Acid (30%)	EN ISO 6530	<1 %	3/3 ¹

1 According to EN 14325 | > Larger than | < Smaller than | <= Smaller than or equal to |

BIOLOGICAL BARRIER

PROPERTY	TEST METHOD	TYPICAL RESULT	EN
Resistance to Penetration by Biologically Contaminated Aerosols	ISO/DIS 22611	log ratio >5	3/3 ²

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PROPERTY	TEST METHOD	TYPICAL RESULT	EN
Resistance to Penetration by Blood and Body Fluids using Synthetic Blood	ISO 16603	20 kPa	6/6 ²
Resistance to Penetration by Blood-borne Pathogens using Bacteriophage Phi-X174	ISO 16604 Procedure C	20 kPa	6/6 ²
Resistance to Penetration by Contaminated Liquids	EN ISO 22610	>75 min	6/6 ²
Resistance to Penetration by Contaminated Solid Particles	ISO 22612	log cfu <1	3/3 ²

1 According to EN 14325 | > Larger than | < Smaller than | <= Smaller than or equal to |

PERMEATION DATA DUPONT™ TYCHEM® 6000 F

HAZARD / CHEMICAL NAME	PHYSICAL STATE	CAS	BT ACT	BT 0.1	BT 1.0	EN	SSPR	MDPR	CUM 480	TIME 150	ISO
1-Bromobutane	Liquid	109-65-9	>480	>480	>480	6	<0.04	0.04	<20	>480	6
2,5-Dimethoxytetrahydrofuran	Liquid	696-59-3	>480	>480	>480	6	<0.04	0.04	<20	>480	6
2-(2-Butoxyethoxy) ethanol	Liquid	112-34-5	>480	>480	>480	6	<0.05	0.05	<24	>480	6
2-Methyl-2-Butanol	Liquid	75-85-4	>480	>480	>480	6	<0.05	0.05	<24	>480	6
2-Methyl-4-isothiazolin-3-one (20%)	Liquid	2682-20-4	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
2-Methyltetrahydrofuran	Liquid	96-47-9	>480	>480	>480	6	<0.04	0.04	<20	>480	6
Acetaldehyde	Liquid	75-07-0	imm	imm	13*/23	1	2	0.06			
Acetic acid (>95%)	Liquid	64-19-7	>480	>480	>480	6	<0.08	0.08	<38.4	>480	6
Acetic acid 2 ethoxy ethyl ester	Liquid	111-15-9	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Acetic acid 2 methoxy ethyl ester	Liquid	110-49-6	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Acetic acid ethenyl ester	Liquid	108-05-4	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Acetic acid ethyl ester	Liquid	141-78-6	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Acetic acid pentyl ester	Liquid	628-63-7	>480	>480	>480	6	0.007	0.001	<10.2	>480	6
Acetic anhydride	Liquid	108-24-7	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Acetic chloride	Liquid	75-36-5	155	>480	>480	6	0.0014	0.0001			
Acetone	Liquid	67-64-1	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Acetone cyanohydrin	Liquid	75-86-5	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Acetonitrile	Liquid	75-05-8	65*/83	131	>480	6	<0.4	0.03	<82	>480	6
Acetyl chloride	Liquid	75-36-5	155	>480	>480	6	0.0014	0.0001			
Acroleic acid	Liquid	79-10-7	>480	>480	>480	6	<0.06	0.06	<28.8	>480	6
Acrolein	Liquid	107-02-8	51*/65	75*/101	>480	6	<0.5	0.02	105	>480	6
Acrolein (10 g/m ²)	Liquid	107-02-8	>480	>480	>480	6	<0.04	0.04	<19.2	>480	6
Acrylamide (50%)	Liquid	79-06-1	>480	>480	>480	6	<0.1	0.1	<48	>480	6
Acrylic acid	Liquid	79-10-7	>480	>480	>480	6	<0.06	0.06	<28.8	>480	6
Acrylic acid ethyl ester	Liquid	140-88-5	imm*/161	imm*/162	imm*/163		<5	0.04			
Acrylic acid n-butyl ester	Liquid	141-32-2	>480	>480	>480	6	<0.05	0.05	>480	>480	6
Acrylicamide (50%)	Liquid	79-06-1	>480	>480	>480	6	<0.1	0.1	<48	>480	6
Acrylonitrile	Liquid	107-13-1	72*/91	73*/92	103	3	8.9	0.0085			
Acryloyl Chloride	Liquid	814-68-6	166*/224	334	>480	6	<0.3	0.04	29.6	>480	6
Adipic acid dinitrile	Liquid	111-69-3	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Adipic acid nitrile	Liquid	111-69-3	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Adiponitrile	Liquid	111-69-3	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Allyl alcohol	Liquid	107-18-6	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Allyl chloride	Liquid	107-05-1	291*/400	381*/447	>480	6	<0.2	0.02	<18.5	>480	6
Amido sulfonic acid (15%)	Liquid	5329-14-6	>480	>480	>480	6	<0.04	0.04	<19.2	>480	6

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HAZARD / CHEMICAL NAME	PHYSICAL STATE	CAS	BT ACT	BT 0.1	BT 1.0	EN	SSPR	MDPR	CUM 480	TIME 150	ISO
Amino benzene	Liquid	62-53-3	>480	>480	>480	6	<0.03	0.03	<14.4	>480	6
Amino diphenyl, 4- (1 mg /ml in Methanol)	Liquid	92-67-1	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Amino ethanol, 2-	Liquid	141-43-5	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Amino ethylethanolamine	Liquid	111-41-1	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Amino ethylethanolamine (60%)	Liquid	111-41-1	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Amino ethylpiperazine	Liquid	140-31-8	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Amino propane, 2-	Liquid	75-31-0	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Ammonia (-33 °C, liquid)	Liquid	7664-41-7	15	20	>480	6	<0.89	0.04	109	>480	6
Ammonia (gaseous)	Vapor	7664-41-7	20	20	21	1	1.5	0.0024			
Ammonium bifluoride (sat)	Liquid	1341-49-7	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Ammonium fluoride (40%)	Liquid	12125-01-8	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Ammonium hydrogendifluoride (sat)	Liquid	1341-49-7	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Ammonium hydroxide (32%)	Liquid	1336-21-6	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Amyl acetate, n-	Liquid	628-63-7	>480	>480	>480	6	0.007	0.001	<10.2	>480	6
Amyl alcohol	Liquid	71-41-0	>480	>480	>480	6	<0.1	0.1	<48	>480	6
Amyl alcohol, tert-	Liquid	75-85-4	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Amyl ester acetic acid	Liquid	628-63-7	>480	>480	>480	6	0.007	0.001	<10.2	>480	6
Anilin, 4-Trifluoromethoxy-	Liquid	461-82-5	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Aniline	Liquid	62-53-3	>480	>480	>480	6	<0.03	0.03	<14.4	>480	6
Anthracene (sat in Toluene)	Liquid	120-12-7	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Anthracin (sat in Toluene)	Liquid	120-12-7	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Antimony pentachloride	Liquid	7647-18-9	<15	<15	<15	1	>10	0.1			
Arsenic (III) chloride	Liquid	7784-34-1	22*/29	32*/38	59	2	334	0.01			
Arsenic trichloride	Liquid	7784-34-1	22*/29	32*/38	59	2	334	0.01			
Azolidine	Liquid	123-75-1	40*/80	45*/100	145*/185	4	4.7	0.05			
Benzaldehyde	Liquid	100-52-7	>480	>480	>480	6	<0.03	0.03	<14.4	>480	6
Benzenamine	Liquid	62-53-3	>480	>480	>480	6	<0.03	0.03	<14.4	>480	6
Benzene	Liquid	71-43-2	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Benzene carbonyl chloride	Liquid	98-88-4	>480	>480	>480	6	<0.08	0.08	<38.4	>480	6
Benzene sulfone chloride	Liquid	98-09-9	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Benzene sulfonyl chloride	Liquid	98-09-9	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Benzisothiazol 1,2- (20%)	Liquid	2634-33-5	>480	>480	>480	6	<0.061	0.061	<30	>480	6
Benzo nitrile	Liquid	100-47-0	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Benzoyl chloride	Liquid	98-88-4	>480	>480	>480	6	<0.08	0.08	<38.4	>480	6
Benzyl alcohol	Liquid	100-51-6	>480	>480	>480	6	<0.1	0.1	<48	>480	6
Benzyl chloride	Liquid	100-44-7	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Benzyl cyanide	Liquid	140-29-4	>390	>390	>390	5	<0.01	0.01	<4.8	>480	6
Benzyl methylamine, N-	Liquid	103-67-3	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Bis (4-(2,3-epoxypropoxy) phenyl)propane	Liquid	1675-54-3	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Bis phenol A diglycidyl ether	Liquid	1675-54-3	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Black Liquor (mix)	Liquid	mix		>480							
Boron fluoride ethyl ether	Liquid	109-63-7	>480	>480	>480	6	<0.05	0.05	<24	>480	6

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HAZARD / CHEMICAL NAME	PHYSICAL STATE	CAS	BT ACT	BT 0.1	BT 1.0	EN	SSPR	MDPR	CUM 480	TIME 150	ISO
Boron trifluoride diethyl etherate	Liquid	109-63-7	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Boron trifluoride dimethyl etherate	Liquid	353-42-4	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Boron trifluoride etherate	Liquid	109-63-7	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Brom thiophene, 2-	Liquid	1003-09-4	>480	>480	>480	6	<0.03	0.03	<14.4	>480	6
Bromine	Liquid	7726-95-6	imm	imm	imm		105	0.001			
Bromo 4-fluorobenzene, 1-	Liquid	460-00-4	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Bromo fluorobenzene, 4-	Liquid	460-00-4	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
But-3-en-2-one	Liquid	78-94-4	287*/379	>480	>480	6	<0.1	0.02	<9.6	>480	6
Butadiene, 1,3- (gaseous)	Vapor	106-99-0	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Butanal, n-	Liquid	123-72-8	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Butanol, 1-	Liquid	71-36-3	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Butanol, n-	Liquid	71-36-3	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Butanol, tert-	Liquid	75-65-0	10*/147	37*/205	>480	6	0.26	0.02			
Butanone	Liquid	78-93-3	imm	40*/64	>480	6	0.36	0.001			
Butanone oxime, 2-	Liquid	96-29-7	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Butenal, 2-	Liquid	123-73-9	121	147	>480	6	<1	0.02	210	405	5
Butoxy ethanol, 2-	Liquid	111-76-2	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Butyl acetate, n-	Liquid	123-86-4	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Butyl acrylate, n-	Liquid	141-32-2	>480	>480	>480	6	<0.05	0.05	>480	>480	6
Butyl alcohol, n-	Liquid	71-36-3	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Butyl amine	Liquid	109-73-9	170	200	>480	6	0.84	0.01	137.5	>480	6
Butyl ether, n-	Liquid	142-96-1	223*/285	223*/285	224*/287	4	14.6	0.021			
Butyl stannium trichloride	Liquid	1118-46-3	>480	>480	>480	6	<0.0001	0.0001	<0.04	>480	6
Butylchloroformate	Liquid	592-34-7	>480	>480	>480	6	<0.07	0.07	<33.6	>480	6
Butyraldehyde, n-	Liquid	123-72-8	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Butyric Acid	Liquid	107-92-6	>480	>480	>480	6	<0.07	0.07	<33.6	>480	6
Calomel (sat)	Liquid	10112-91-1	>480	>480	>480	6	<0.1	0.1	<48	>480	6
Carbon disulfide	Liquid	75-15-0	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Carbon tetrachloride	Liquid	56-23-5	imm	imm*/11	>480	6	0.57	0.001			
Carbon tetrachloride (1000 ppm)	Vapor	56-23-5	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Caustic ammonia (32%)	Liquid	1336-21-6	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Caustic soda (50% at 50 ° C)	Liquid	1310-73-2	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Caustic soda (50%)	Liquid	1310-73-2	>480	>480	>480	6	<0.025	0.025	<12	>480	6
Cellosolve acetate	Liquid	110-80-5	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Chemguard S-764P14A	Liquid	mix	>480	>480	>480	6	<0.01	0.01	<5	>480	6
Chlor allylene	Liquid	107-05-1	291*/400	381*/447	>480	6	<0.2	0.02	<18.5	>480	6
Chlor trinitromethan	Liquid	76-06-2	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Chlorine (gaseous)	Vapor	7782-50-5	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Chloro 1,3-butadiene, 2- (50% in Butanol)	Liquid	126-99-8	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Chloro 1-methylbenzene, 2-	Liquid	95-49-8	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Chloro 2,3-epoxy propane, 1-	Liquid	106-89-8	355	395	>480	6	<0.4	0.02	18.4	>480	6
Chloro 2-nitrobenzene, 1- (35-40 °C, molten)	Liquid	88-73-3	>480	>480	>480	6	<0.1	0.1	<48	>480	6
Chloro acetic acid (80%)	Liquid	79-11-8	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6

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HAZARD / CHEMICAL NAME	PHYSICAL STATE	CAS	BT ACT	BT 0.1	BT 1.0	EN	SSPR	MDPR	CUM 480	TIME 150	ISO
Chloro acetone (95%)	Liquid	78-95-5	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Chloro acrylonitrile, 2-	Liquid	920-37-6	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Chloro aniline, p- (70 °C, molten)	Liquid	106-47-8		imm	11	1	256	0.0206			
Chloro benzenamine, 4- (70 °C, molten)	Liquid	106-47-8		imm	11	1	256	0.0206			
Chloro benzene	Liquid	108-90-7	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Chloro ethanol, 2-	Liquid	107-07-3	>480	>480	>480	6	<0.06	0.06	<28.8	>480	6
Chloro ethene	Vapor	75-01-4	imm	>480	>480	6	0.02	0.001	<9.6	>480	6
Chloro methyl methyl ether	Liquid	107-30-2	imm*/11	imm*/37	>480	6	0.75	0.001			
Chloro picrin	Liquid	76-06-2	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Chloro prene, 3-	Liquid	107-05-1	291*/400	381*/447	>480	6	<0.2	0.02	<18.5	>480	6
Chloro propan-2-one, 1- (95%)	Liquid	78-95-5	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Chloro toluene, alpha-	Liquid	100-44-7	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Chloro toluene, o-	Liquid	95-49-8	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Chloroacetic ethylester	Liquid	105-39-5	>480	>480	>480	6	<0.06	0.06	<28.8	>480	6
Chloroacetic ethylester (75% in Ethanol)	Liquid	105-39-5	>480								
Chloroform	Liquid	67-66-3	imm	imm	imm		10.6	0.001			
Chloroform (1000 ppm)	Vapor	67-66-3	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Chlorsulfonic acid	Liquid	7790-94-5	423	>480	>480	6	0.0003	0.0001			
Chromic acid (CrO3) (44.9%)	Liquid	1333-82-0	>480	>480	>480	6	<0.07	0.07	<33.6	>480	6
Citric acid (sat)	Liquid	77-92-9	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Creosote	Liquid	8001-58-9	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Cresol o-	Liquid	95-48-7	173	179	211	4	<4	0.02	674	295	5
Cresols, mixed isomers	Liquid	1319-77-3	>480	>480	>480	6	<0.03	0.03	<14.4	>480	6
Cresylic acid	Liquid	1319-77-3	>480	>480	>480	6	<0.03	0.03	<14.4	>480	6
Croton aldehyde	Liquid	123-73-9	121	147	>480	6	<1	0.02	210	405	5
Cumene	Liquid	98-82-8	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Cyanamide (50%)	Liquid	420-04-2	62*/208	nm	>480	6	na	0.17	<81.6	>480	6
Cyanobenzene	Liquid	100-47-0	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Cyanoethylene	Liquid	107-13-1	72*/91	73*/92	103	3	8.9	0.0085			
Cyanomethane	Liquid	75-05-8	65*/83	131	>480	6	<0.4	0.03	<82	>480	6
Cyanopropan-2-ol, 2-	Liquid	75-86-5	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Cyclo hexane	Liquid	110-82-7	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Cyclo hexanone	Liquid	108-94-1	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Dahlgren Decon solution	Liquid	mix	>480	>480	>480	6	<0.025	0.025	<12	>480	6
Diamino sulfo chloride	Liquid	13360-57-1	>480	>480	>480	6	<0.04	0.04	<19.2	>480	6
Diaminoethane, 1,2-	Liquid	107-15-3	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Dibromoethane, 1,2-	Liquid	106-93-4	84*/153	144*/288	>480	6	0.52	0.001			
Dibutyl 1,2-benzenedicarboxylate	Liquid	84-74-2		nm	>480	6		0.05			
Dibutyl phthalate	Liquid	84-74-2		nm	>480	6		0.05			
Dibutyl sebacate	Liquid	109-43-3		nm	>480	6	<1	1			
Dichlorbenzen, 1,2-	Liquid	95-50-1	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Dichlorbenzen, 1,3-	Liquid	541-73-1	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Dichlorbenzen, 1,4- (50% in Ethanol)	Liquid	106-46-7	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6

TECHNICAL DATA SHEET

HAZARD / CHEMICAL NAME	PHYSICAL STATE	CAS	BT ACT	BT 0.1	BT 1.0	EN	SSPR	MDPR	CUM 480	TIME 150	ISO
Dichlorethane, 1,2,-	Liquid	107-06-2	65*/83	93	109	3	<3	0.04	898	182	4
Dichloro -2-propanone, 1,3- (45 °C, molten)	Liquid	534-07-6	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Dichloro acetone, 1,3- (45 °C, molten)	Liquid	534-07-6	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Dichloro acetyl chloride	Liquid	79-36-7	160	160	180	4	78.41	0.01			
Dichloro ethyl ether	Liquid	111-44-4	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Dichloro ethylene, 1,1-	Liquid	75-35-4	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Dichloro methane	Liquid	75-09-2	imm	imm	imm		23.7	0.03			
Dichloro methane (10.000 ppm)	Vapor	75-09-2	imm	52	>480	6	<0.21	0.05	100	>480	6
Dichloro methane (1000 ppm)	Vapor	75-09-2	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Dichloro propene, 2,3-	Liquid	78-88-6	imm	imm*/25	54*/143	2	2.4	0.001			
Dicyanobutane, 1,4-	Liquid	111-69-3	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Diesel Fuel Grade D-2	Liquid	mix	>480	>480	>480	6	<0.03	0.03	<14.4	>480	6
Diesel fuel	Liquid	68334-30-5	8*/323	>480	>480	6	0.02	0.001			
Diethyl amine	Liquid	109-89-7	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Diethyl benzene (95%)	Liquid	25340-17-4	>480	>480	>480	6	<0.0216	0.0216	<10.4	>480	6
Diethyl ethanamine, N,N-	Liquid	121-44-8	>480	>480	>480	6	0.05	0.05	<24	>480	6
Diethyl ether	Liquid	60-29-7	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Diethyl sulfate	Liquid	64-67-5	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Diethylene glycol monobutyl ether	Liquid	112-34-5	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Diethylene triamine	Liquid	111-40-0	imm	>480	>480	6	<0.01	0.005	<4.8	>480	6
Diisopropyl L-tartrate	Liquid	2217-15-4	>480	>480	>480	6	<0.04	0.0377	0	>480	6
Diketene Acetone (95%)	Liquid	5394-63-8	>480	>480	>480	6	<0.0229	0.0229	<11	>480	6
Dimethyl Carbonate (DMC)	Liquid	616-38-6	>480	>480	>480	6	<0.021	0.021	0	>480	6
Dimethyl acetamide, N,N-	Liquid	127-19-5	>480	>480	>480	6	<0.014	0.014	<6.7	>480	6
Dimethyl amine	Vapor	124-40-3	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Dimethyl aniline, N,N-	Liquid	121-69-7	>480	>480	>480	6	<0.1	0.1	<48	>480	6
Dimethyl dichlorosilane	Liquid	75-78-5	>480	>480	>480	6	<0.0001	0.0001	<0.04	>480	6
Dimethyl formamide, N,N-	Liquid	68-12-2	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Dimethyl fumarate (27 °C, solid)	Solid	624-49-7	>480	nm	>480	6	<0.39	0.39			
Dimethyl fumarate (37 °C, solid)	Solid	624-49-7	>480	nm	>480	6	<0.39	0.39			
Dimethyl ketal	Liquid	67-64-1	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Dimethyl ketone	Liquid	67-64-1	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Dimethyl nitrosamine	Liquid	62-75-9	>480	>480	>480	6	<0.001	0.001	<0.48	>480	6
Dimethyl phenylamine, N, N-	Liquid	121-69-7	>480	>480	>480	6	<0.1	0.1	<48	>480	6
Dimethyl phosphite	Liquid	868-85-9	>480	>480	>480	6	<0.1	0.012	0	>480	6
Dimethyl propandioate	Liquid	108-59-8	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Dimethyl sulfate	Liquid	77-78-1	>480	>480	>480	6	<0.09	0.09	<43.2	>480	6
Dimethyl sulfide	Liquid	75-18-3	83*/139	271	452	5	1.21	0.02			
Dimethyl sulfoxide	Liquid	67-68-5	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Dimethylmalonate	Vapor	108-59-8	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Dioxane, 1,4-	Liquid	123-91-1	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Diphenyl methane diisocyanate, 4,4'- (50 °C, molten)	Liquid	101-68-8	>480	>480	>480	6	<0.0403	0.0403	<19.3	>480	6

TECHNICAL DATA SHEET

HAZARD / CHEMICAL NAME	PHYSICAL STATE	CAS	BT ACT	BT 0.1	BT 1.0	EN	SSPR	MDPR	CUM 480	TIME 150	ISO
Diphosgene	Liquid	503-38-8	>480	>480	>480	6	<0.04	0.04	<19.2	>480	6
Dowtherm Heat Transfer Fluid	Liquid	mix	>480	>480	>480	6	<0.0267	0.0267	<13	>480	6
Dytek® A	Liquid	15520-10-2	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Epichlorohydrin	Liquid	106-89-8	355	395	>480	6	<0.4	0.02	18.4	>480	6
Epoxy ethane (gaseous)	Vapor	75-21-8	106	126	>480	6	<0.35	0.05	76	>480	6
Epoxy propane, 1,2-	Liquid	75-56-9	41	43	51	2	<5	0.03	1860	114	3
Ethane 1,2-diol	Liquid	107-21-1	>480	>480	>480	6	<0.001	0.001	<0.48	>480	6
Ethane dioic acid (sat)	Liquid	144-62-7	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Ethane diol dipropanoate, 1,2-	Liquid	123-73-9	121	147	>480	6	<1	0.02	210	405	5
Ethane nitrile	Liquid	75-05-8	65*/83	131	>480	6	<0.4	0.03	<82	>480	6
Ethane thiol	Liquid	75-08-1	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Ethane trichloride	Liquid	79-00-5	120*/173	164*/232	202*/302	4	9.1	0.01			
Ethanol	Liquid	64-17-5	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Ethanol amine	Liquid	141-43-5	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Ethanoyl chloride	Liquid	75-36-5	155	>480	>480	6	0.0014	0.0001			
Ethansulphonic acid (70%)	Liquid	594-45-6	>480	>480	>480	6	<0.08	0.08	<38.4	>480	6
Ethoxy ethanol, 2-	Liquid	110-80-5	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Ethoxy ethylacetat	Liquid	111-15-9	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Ethyl Cellosolve®	Liquid	110-80-5	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Ethyl acetate	Liquid	141-78-6	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Ethyl acrylate	Liquid	140-88-5	imm*/161	imm*/162	imm*/163		<5	0.04			
Ethyl alcohol	Liquid	64-17-5	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Ethyl benzene	Liquid	100-41-4	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Ethyl ethanamine, N-	Liquid	109-89-7	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Ethyl ether	Liquid	60-29-7	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Ethyl glycol acetate	Liquid	111-15-9	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Ethyl hexanoic acid	Liquid	149-57-5	>480	>480	>480	6	<0.04	0.04	<19.2	>480	6
Ethyl mercaptan	Liquid	75-08-1	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Ethyl methyl carbonate (EMC)	Liquid	623-53-0	>480	>480	>480	6	<0.019	0.019	0	>480	6
Ethyl nitrile	Liquid	75-05-8	65*/83	131	>480	6	<0.4	0.03	<82	>480	6
Ethylchloroformate	Liquid	541-41-3	>480	>480	>480	6	<0.04	0.04	<19.2	>480	6
Ethylene Carbonate solution (60%)	Liquid	96-49-1	>480	>480	>480	6	<0.044	0.044	0	>480	6
Ethylene carboxylic acid	Liquid	79-10-7	>480	>480	>480	6	<0.06	0.06	<28.8	>480	6
Ethylene chlorohydrin	Liquid	107-07-3	>480	>480	>480	6	<0.06	0.06	<28.8	>480	6
Ethylene diamine	Liquid	107-15-3	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Ethylene dibromide	Liquid	106-93-4	84*/153	144*/288	>480	6	0.52	0.001			
Ethylene dichloride	Liquid	107-06-2	65*/83	93	109	3	<3	0.04	898	182	4
Ethylene glycol	Liquid	107-21-1	>480	>480	>480	6	<0.001	0.001	<0.48	>480	6
Ethylene glycol mono ethyl ether acetate	Liquid	111-15-9	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Ethylene glycol monobutyl ether	Liquid	111-76-2	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Ethylene glycol monoethyl ether	Liquid	110-80-5	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Ethylene glycol monomethyl ether	Liquid	109-86-4	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6

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HAZARD / CHEMICAL NAME	PHYSICAL STATE	CAS	BT ACT	BT 0.1	BT 1.0	EN	SSPR	MDPR	CUM 480	TIME 150	ISO
Ethylene glycol monomethyl ether acetate	Liquid	110-49-6	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Ethylene oxide (gaseous)	Vapor	75-21-8	106	126	>480	6	<0.35	0.05	76	>480	6
Ethylene tetrachloride	Liquid	127-18-4	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Ethylene trichloride	Liquid	79-01-6	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Ferric (II) chloride (sat)	Liquid	7758-94-3	>480	>480	>480	6	<0.07	0.07	<33.6	>480	6
Ferric (III) chloride (40%)	Liquid	7705-08-0	>480	>480	>480	6	<0.03	0.03	<14.4	>480	6
Fluorobenzene	Liquid	462-06-6	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Fluorosilicic acid (33-35%)	Liquid	16961-83-4	>480	>480	>480	6	<0.04	0.04	<19.2	>480	6
Fluorosulfonic acid	Liquid	7789-21-1	87	194	>480	6	na	0.02	29	>480	6
Formaldehyde (37%)	Liquid	50-00-0	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Formalin (37% (10-15% Methanol))	Liquid	50-00-0	>480	>480	>480	6	<0.0048	0.0048	<2.3	>480	6
Formalin (37%)	Liquid	50-00-0	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Formic acid (50%)	Liquid	64-18-6	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Formic acid (>95%)	Liquid	64-18-6	172	260	>480	6	0.24	0.001			
Furaldehyde, 2-	Liquid	98-01-1	459	>480	>480	6	na	0.03	<14.4	>480	6
Furan	Liquid	110-00-9	75	97	>480	6	<1	0.02	206	411	5
Furfural	Liquid	98-01-1	459	>480	>480	6	na	0.03	<14.4	>480	6
Gasoline, leaded	Liquid	mix	imm	imm*/21			0.32	0.001			
Gasoline, unleaded	Liquid	86290-81-5	>480	>480	>480	6	<0.001	0.001	<0.48	>480	6
Glutaral (50%)	Liquid	111-30-8	150	170	200	4	1.861	0.01			
Glutaraldehyde (50%)	Liquid	111-30-8	150	170	200	4	1.861	0.01			
Glycol alcohol	Liquid	107-21-1	>480	>480	>480	6	<0.001	0.001	<0.48	>480	6
Glycol chlorohydrin	Liquid	107-07-3	>480	>480	>480	6	<0.06	0.06	<28.8	>480	6
Green Liquor (mix)	Liquid	mix		>480							
Heptane	Liquid	142-82-5	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Hexamethylene diamine (45 °C, molten)	Liquid	124-09-4	423	>480	>480	6	0.003	0.0001	<1.4	>480	6
Hexamethylene diisocyanate	Liquid	822-06-0	>480	>480	>480	6	<0.0271	0.0271	<13	>480	6
Hexane, n-	Liquid	110-54-3	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Hexanone	Liquid	108-94-1	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Hexone	Liquid	108-10-1	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Hexyl chloro formate, 2-	Liquid	6092-54-2	>480	>480	>480	6	<0.08	0.08	<38.4	>480	6
Hydrazine	Liquid	302-01-2	269	283	352	5	2.3	0.001			
Hydriodic acid (55-57%)	Liquid	10034-85-2	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Hydrobromic acid (48%)	Liquid	10035-10-6	>480	>480	>480	6	<0.04	0.04	<19.2	>480	6
Hydrochloric acid (37%)	Liquid	7647-01-0	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Hydrofluoric acid (48-51%)	Liquid	7664-39-3	>480	>480	>480	6	<0.025	0.025	<12	>480	6
Hydrofluoric acid (60%)	Liquid	7664-39-3	18	52	373	5	na	0.005			
Hydrofluoric acid (70%)	Liquid	7664-39-3	22	35	293	5	na	0.005	414	227	4
Hydrogen bromide (gaseous)	Vapor	10035-10-6	>480	>480	>480	6	<0.0001	0.0001	<0.04	>480	6
Hydrogen chloride (gaseous)	Vapor	7647-01-0	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Hydrogen fluoride (20-27 ° C, gaseous)	Vapor	7664-39-3	imm	imm	23	1	na	0.05			
Hydrogen peroxide (50%)	Liquid	7722-84-1	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Hydrogen peroxide (70%)	Liquid	7722-84-1	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6

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HAZARD / CHEMICAL NAME	PHYSICAL STATE	CAS	BT ACT	BT 0.1	BT 1.0	EN	SSPR	MDPR	CUM 480	TIME 150	ISO
Hydroxy 1,2,3-propanetricarboxylic acid, 2- (sat)	Liquid	77-92-9	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Hydroxy 1-ethanethiol, 2-	Liquid	60-24-2	>480	>480	>480	6	<0.08	0.08	<38.4	>480	6
Hydroxy 2-methylpropionitrile, 2-	Liquid	75-86-5	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Hydroxy isobutyronitrile	Liquid	75-86-5	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Hydroxy toluene	Liquid	100-51-6	>480	>480	>480	6	<0.1	0.1	<48	>480	6
Hydroxy toluene, o-	Liquid	95-48-7	173	179	211	4	<4	0.02	674	295	5
Hypophosphorus acid (50%)	Liquid	6303-21-5	>480	>480	>480	6	<0.09	0.09	<43.2	>480	6
Iodomethane	Liquid	74-88-4	254	296	>480	6	na	0.07	53.6	>480	6
Isobutyl methyl ketone	Liquid	108-10-1	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Isophthaloyldichloride (45 °C, molten)	Liquid	99-63-8	>480	>480	>480	6	<0.0001	0.0001	<0.04	>480	6
Isopropanol	Liquid	67-63-0	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Isopropyl Acetate	Liquid	108-21-4	>480	>480	>480	6	<0.1	0.033	0	>480	6
Isopropyl alcohol	Liquid	67-63-0	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Isopropyl amine	Liquid	75-31-0	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Isopropyl benzene	Liquid	98-82-8	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Isopropyl bromoacetate (>95%)	Liquid	29921-57-1	>480	>480	>480	6	<0.04	0.04	<19.2	>480	6
Isopropylidenediphenol diglycidyl ether, 4,4'-	Liquid	1675-54-3	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Kerosene	Liquid	8008-20-6	>480	>480	>480	6	<0.001	0.001	<0.48	>480	6
Ketone propane	Liquid	67-64-1	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Lewisite (L), FINABEL 0.7.C	Liquid	541-25-3	>155 ⁸	>155 ⁸							
Lewisite (L), MIL-STD-282 (100 g/m ²)	Liquid	541-25-3		360 ⁸							
Limonene d-	Liquid	5989-27-5	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Lithium Hexafluorophosphate (sat.)	Liquid	21324-40-3	>480	>480	>480	6	<0.07	0.07	<33.6	>480	6
MEK	Liquid	78-93-3	imm	40*/64	>480	6	0.36	0.001			
Maleic anhydride (66 °C, molten)	Liquid	108-31-6	21	22	24	1	24.6	0.016			
Mercapto acetic acid	Liquid	68-11-1	>480	>480	>480	6	<0.0001	0.0001	<0.04	>480	6
Mercapto ethanol	Liquid	60-24-2	>480	>480	>480	6	<0.08	0.08	<38.4	>480	6
Mercuric I chloride (sat)	Liquid	10112-91-1	>480	>480	>480	6	<0.1	0.1	<48	>480	6
Mercury	Liquid	7439-97-6	>480	>480	>480	6	<0.09	0.09	<43.2	>480	6
Methacrylic acid	Liquid	79-41-4	>480	>480	>480	6	<0.0001	0.0001	<0.04	>480	6
Methallyl Alcohol	Liquid	513-42-8	>480	>480	>480	6	<0.01	0.0116	0	>480	6
Methanesulfonyl chloride	Liquid	124-63-0	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Methanesulphonic acid	Liquid	75-75-2	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Methanethiol	Vapor	74-93-1	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Methanol	Liquid	67-56-1	56	117	>480	6	0.14	0.02			
Methoxy 2-methylpropane, 2-	Liquid	1634-04-4	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Methoxy chloromethane	Liquid	107-30-2	imm*/11	imm*/37	>480	6	0.75	0.001			
Methoxy ethanol, 2	Liquid	109-86-4	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Methoxy ethylacetate, 2-	Liquid	110-49-6	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Methyl -2-pyridyl acetate	Liquid	1658-42-0	>480	>480	>480	6	<0.05	0.05	<24	>480	6

TECHNICAL DATA SHEET

HAZARD / CHEMICAL NAME	PHYSICAL STATE	CAS	BT ACT	BT 0.1	BT 1.0	EN	SSPR	MDPR	CUM 480	TIME 150	ISO
Methyl 1,5-pentanedinitrile, 2-	Liquid	4553-62-2	>480	>480	>480	6	<0.1	0.1	<48	>480	6
Methyl 2-methyl-2-propenoate	Liquid	80-62-6	imm*/26	imm*/53			1.4	0.001			
Methyl 2-pyrrolidone, N-	Liquid	872-50-4	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Methyl 4-isopropenyl-1-cyclohexene, 1-	Liquid	5989-27-5	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Methyl Ethyl Ketone Peroxide (35%)	Liquid	1338-23-4	>480	>480	>480	6	<0.018	0.018	<10	>480	6
Methyl N-nitrosomethanamine, N-	Liquid	62-75-9	>480	>480	>480	6	<0.001	0.001	<0.48	>480	6
Methyl acetyl	Liquid	67-64-1	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Methyl acrolein	Liquid	123-73-9	121	147	>480	6	<1	0.02	210	405	5
Methyl acrylate	Liquid	96-33-3	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Methyl amine (gaseous)	Vapor	74-89-5	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Methyl aniline, o-	Liquid	95-53-4	>480	>480	>480	6	<0.03	0.03	<14.4	>480	6
Methyl benzol	Liquid	108-88-3	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Methyl benzylamine, N-	Liquid	103-67-3	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Methyl chloride (gaseous)	Vapor	74-87-3	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Methyl chloro formate	Liquid	79-22-1	99*/175	204*/308	>480	6	0.17	0.05	<24	>480	6
Methyl cyanide	Liquid	75-05-8	65*/83	131	>480	6	<0.4	0.03	<82	>480	6
Methyl ethyl ketone	Liquid	78-93-3	imm	40*/64	>480	6	0.36	0.001			
Methyl ethyl ketoxime	Liquid	96-29-7	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Methyl formamide, N-	Liquid	123-39-7	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Methyl hydrazine	Liquid	60-34-4	83*/206	183*/283	280*/413	5	0.98	0.01			
Methyl imidazole, 1-	Liquid	616-47-7	>480	>480	>480	6	<0.06	0.06	<28.8	>480	6
Methyl iodide	Liquid	74-88-4	254	296	>480	6	na	0.07	53.6	>480	6
Methyl isocyanate	Liquid	624-83-9	imm	imm			0.42	0.001			
Methyl ketone	Liquid	67-64-1	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Methyl mercaptan	Vapor	74-93-1	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Methyl methacrylate	Liquid	80-62-6	imm*/26	imm*/53			1.4	0.001			
Methyl pentan-2-one, 4-	Liquid	108-10-1	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Methyl phenols	Liquid	1319-77-3	>480	>480	>480	6	<0.03	0.03	<14.4	>480	6
Methyl propan-2-ol, 2-	Liquid	75-65-0	10*/147	37*/205	>480	6	0.26	0.02			
Methyl propenoic acid, 2-	Liquid	79-41-4	>480	>480	>480	6	<0.0001	0.0001	<0.04	>480	6
Methyl pyridine, 2-	Liquid	109-06-8	>480	>480	>480	6	<0.024	0.024	<11.5	>480	6
Methyl pyridine, 3-	Liquid	108-99-6	>480	>480	>480	6	<0.024	0.024	<11.5	>480	6
Methyl tert-butyl ether	Liquid	1634-04-4	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Methyl trichlorosilane	Liquid	75-79-6	>480	>480	>480	6	<0.0001	0.0001	<0.04	>480	6
Methyl vinyl ketone	Liquid	78-94-4	287*/379	>480	>480	6	<0.1	0.02	<9.6	>480	6
Methylcyclohexane	Liquid	108-87-2	>480	>480	>480	6	<0.04	0.04	<20	>480	6
Methylen Isocyclohexylamine, 4,4- (40 °C)	Liquid	1761-71-3	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Methylene bromide	Liquid	74-95-3	imm	imm	20	1	111	0.05			
Methylene chloride	Liquid	75-09-2	imm	imm	imm		23.7	0.03			
Methylene chloride (10.000 ppm)	Vapor	75-09-2	imm	52	>480	6	<0.21	0.05	100	>480	6
Methylene chloride (1000 ppm)	Vapor	75-09-2	>480	>480	>480	6	<0.05	0.05	<24	>480	6

TECHNICAL DATA SHEET

HAZARD / CHEMICAL NAME	PHYSICAL STATE	CAS	BT ACT	BT 0.1	BT 1.0	EN	SSPR	MDPR	CUM 480	TIME 150	ISO
Methylene diphenyl diisocyanate, 4,4'- (50 °C, molten)	Liquid	101-68-8	>480	>480	>480	6	<0.0403	0.0403	<19.3	>480	6
Naphthalene	Solid	91-20-3	>480	>480	>480	6	<0.001	0.001	<0.48	>480	6
Naphthalene (25% in Diethylene glycol dimethylether)	Liquid	91-20-3	>480	>480	>480	6	<0.007	0.007	<3.4	>480	6
Neoprene (50% in Butanol)	Liquid	126-99-8	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Nicotine	Liquid	54-11-5	>480	>480	>480	6	<0.1	0.1	<48	>480	6
Nitric acid (70%)	Liquid	7697-37-2	>480	>480	>480	6	<0.04	0.04	<19.2	>480	6
Nitric acid (>95%)	Liquid	7697-37-2	14*/19	46	65*/82	3	<8	<0.03	34/90 min	134	4
Nitric acid, red fuming (90%)	Liquid	52583-42-3	imm	imm*/10	32	2	na	0.08	342/80 min	59	2
Nitro benzene	Liquid	98-95-3	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Nitro chlormethan	Liquid	76-06-2	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Nitro methane	Liquid	75-52-5	157	233			0.97	0.001			
Nitro propane, 2-	Liquid	79-46-9	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Nitro toluene, 2-	Liquid	88-72-2	>480	>480	>480	6	<0.03	0.03	<14.4	>480	6
Nitrogen dioxide	Vapor	10102-44-0	<15	<15			>0.2	0.01			
Norflurane	Vapor	811-97-2	>480	>480	>480	6	<0.04	0.04	<19.2	>480	6
Octyl chlor formiate	Liquid	7452-59-7	>480	>480	>480	6	<0.06	0.06	<28.8	>480	6
Oleum (20% free SO3)	Liquid	8014-95-7	>480	>480	>480	6	<0.06	0.06	<28.8	>480	6
Oleum (40% free SO3)	Liquid	8014-95-7	130*/220	455*/468	>480	6	0.32	0.0001			
Oleum (65% free SO3)	Liquid	8014-95-7	180	248	370	5	na	0.04	398	428	5
Oxalic acid (sat)	Liquid	144-62-7	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
PCB in transformer oil (mix)	Liquid	mix	324*/428	>480	>480	6	0.032	0.01			
Pentachloroantimony	Liquid	7647-18-9	<15	<15	<15	1	>10	0.1			
Pentanedial, 1,5- (50%)	Liquid	111-30-8	150	170	200	4	1.861	0.01			
Pentanoic acid	Liquid	109-52-4	>480	>480	>480	6	<0.03	0.03	<14.4	>480	6
Pentanol, 1-	Liquid	71-41-0	>480	>480	>480	6	<0.1	0.1	<48	>480	6
Pentanol, tert-	Liquid	75-85-4	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Pentene nitrile, 2-	Liquid	13284-42-9	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Pentyl acetate	Liquid	628-63-7	>480	>480	>480	6	0.007	0.001	<10.2	>480	6
Peracetic Acid (32%)	Liquid	79-21-0	>480	>480	>480	6	<0.0123	0.0123	<6	>480	6
Perchloric acid (70%)	Liquid	7601-90-3	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Phenethylene	Liquid	100-42-5	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Phenol (45 °C, molten)	Liquid	108-95-2	22	25	29	1	na	0.05	>355, 120 min	56	2
Phenol (60 °C, molten)	Liquid	108-95-2	imm	imm	imm		na	0.01	426/24 min	14	1
Phenol (85%)	Liquid	108-95-2	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Phenyl acetonitrile	Liquid	140-29-4	>390	>390	>390	5	<0.01	0.01	<4.8	>480	6
Phenyl amine	Liquid	62-53-3	>480	>480	>480	6	<0.03	0.03	<14.4	>480	6
Phenyl chlor formiate	Liquid	1885-14-9	>480	>480	>480	6	<0.06	0.06	<28.8	>480	6
Phenyl chloride	Liquid	108-90-7	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Phenyl cyanide	Liquid	100-47-0	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Phenyl ethane	Liquid	100-41-4	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Phenyl ethanol, 1-	Liquid	98-85-1	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Phenyl propane, 2-	Liquid	98-82-8	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Phenyl trichlorosilane	Liquid	98-13-5	>480	>480	>480	6	<0.0001	0.0001	<0.04	>480	6

TECHNICAL DATA SHEET

HAZARD / CHEMICAL NAME	PHYSICAL STATE	CAS	BT ACT	BT 0.1	BT 1.0	EN	SSPR	MDPR	CUM 480	TIME 150	ISO
Phosgene	Vapor	75-44-5	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Phosphine	Vapor	7803-51-2	imm	imm			>0.11	0.003			
Phosphinic acid (50%)	Liquid	6303-21-5	>480	>480	>480	6	<0.09	0.09	<43.2	>480	6
Phosphoric acid (85%)	Liquid	7664-38-2	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Phosphorus oxychloride	Liquid	10025-87-3		>480	>480	6	<0.01	0.01	<4.8	>480	6
Phosphorus trichloride	Liquid	7719-12-2	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Picoline, 2-	Liquid	109-06-8	>480	>480	>480	6	<0.024	0.024	<11.5	>480	6
Picoline, 3-	Liquid	108-99-6	>480	>480	>480	6	<0.024	0.024	<11.5	>480	6
Pimelic ketone	Liquid	108-94-1	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Polymethylene polyphenylene isocyanate (p-MDI)	Liquid	9016-87-9	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Potassium acetate (sat)	Liquid	127-08-2	>480	>480	>480	6	<0.07	0.07	<33.6	>480	6
Potassium chromate (sat)	Liquid	7789-00-6	>480	>480	>480	6	<0.08	0.08	<38.4	>480	6
Potassium hydroxide (45%)	Liquid	1310-58-3	>480	>480	>480	6	<0.023	0.023	<11	>480	0
Potassium hydroxide (50%)	Liquid	1310-58-3	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Prop-2-en-1-al	Liquid	107-02-8	51*/65	75*/101	>480	6	<0.5	0.02	105	>480	6
Prop-2-en-1-al (10 g/m ²)	Liquid	107-02-8	>480	>480	>480	6	<0.04	0.04	<19.2	>480	6
Prop-2-yn-1-ol	Liquid	107-19-7	123	123	127	4	37.9	0.07			
Propan-1-ol	Liquid	71-23-8	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Propan-2-ol	Liquid	67-63-0	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Propan-2-one	Liquid	67-64-1	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Propanoic acid	Liquid	79-09-4	>480	>480	>480	6	<0.03	0.03	<14.4	>480	6
Propanol, 1-	Liquid	71-23-8	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Propanol, n-	Liquid	71-23-8	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Propargyl alcohol	Liquid	107-19-7	123	123	127	4	37.9	0.07			
Propen 1-ol, 2-	Liquid	107-18-6	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Propenamide (50%)	Liquid	79-06-1	>480	>480	>480	6	<0.1	0.1	<48	>480	6
Propene acid	Liquid	79-10-7	>480	>480	>480	6	<0.06	0.06	<28.8	>480	6
Propenenitrile, 2-	Liquid	107-13-1	72*/91	73*/92	103	3	8.9	0.0085			
Propenoic acid butyl ester, 2-	Liquid	141-32-2	>480	>480	>480	6	<0.05	0.05	>480	>480	6
Propenoic acid nitrile	Liquid	107-13-1	72*/91	73*/92	103	3	8.9	0.0085			
Propylchloroformate	Liquid	109-61-5	>480	>480	>480	6	<0.03	0.03	<14.4	>480	6
Propyl alcohol	Liquid	71-23-8	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Propyl amine, n-	Liquid	107-10-8	imm	16*/21	>480	6	0.52	0.05			
Propyl bromide, n-	Liquid	106-94-5	>480	>480	>480	6	<0.03	0.03	<14.4	>480	6
Propylene aldehyde	Liquid	123-73-9	121	147	>480	6	<1	0.02	210	405	5
Propylene oxide, 1,2-	Liquid	75-56-9	41	43	51	2	<5	0.03	1860	114	3
Pyridene, 2-fluoro-6-(trifluoromethyl)	Liquid	94239-04-0	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Pyridine	Liquid	110-86-1	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Pyroacetic ether	Liquid	67-64-1	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Pyrrolidine	Liquid	123-75-1	40*/80	45*/100	145*/185	4	4.7	0.05			
Sarin (GB), FINABEL 0.7.C	Liquid	107-44-8		>1400 ⁸							
Sarin (GB), MIL-STD-282 (100 g/m ²)	Liquid	107-44-8		>480 ⁸							
Silane	Vapor	7803-62-5	>480	>480	>480	6	<0.1	0.1	<48	>480	6

TECHNICAL DATA SHEET

HAZARD / CHEMICAL NAME	PHYSICAL STATE	CAS	BT ACT	BT 0.1	BT 1.0	EN	SSPR	MDPR	CUM 480	TIME 150	ISO
Silicon tetrachloride	Liquid	10026-04-7	>480	>480	>480	6	<0.0001	0.0001	<0.04	>480	6
Sodium bisulphite (38-40%)	Liquid	7631-90-5	>480	>480	>480	6	<0.07	0.07	<33.6	>480	6
Sodium cyanide (45%)	Liquid	143-33-9	>480	>480	>480	6	<0.1	0.1	<48	>480	6
Sodium cyanide (sat)	Liquid	143-33-9	>480	>480	>480	6	<0.07	0.07	<33.6	>480	6
Sodium hydroxide (50% at 50 °C)	Liquid	1310-73-2	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Sodium hydroxide (50%)	Liquid	1310-73-2	>480	>480	>480	6	<0.025	0.025	<12	>480	6
Sodium hypochlorite (15%)	Liquid	7681-52-9	>480	>480	>480	6	<0.03	0.03	<14.4	>480	6
Soman (GD), FINABEL 0.7.C	Liquid	96-64-0		>1400 ⁸							
Soman (GD), MIL-STD-282 (100 g/m ²)	Liquid	96-64-0		>480 ⁸							
Spiritus	Liquid	64-17-5	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Styrene	Liquid	100-42-5	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Sulfamic acid (15%)	Liquid	5329-14-6	>480	>480	>480	6	<0.04	0.04	<19.2	>480	6
Sulfamidic acid (15%)	Liquid	5329-14-6	>480	>480	>480	6	<0.04	0.04	<19.2	>480	6
Sulfur Mustard (HD), FINABEL 0.7.C	Liquid	505-60-2		>1400 ⁸							
Sulfur Mustard (HD), MIL-STD-282 (100 g/m ²)	Liquid	505-60-2		>480 ⁸							
Sulfur dioxide	Vapor	7446-09-5	28*/46	28*/46	>480	6	<0.5	0.1	<94	>480	6
Sulfuric acid (98% at 50 °C)	Liquid	7664-93-9	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Sulfuric acid (>95%)	Liquid	7664-93-9	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Sulfuric acid diethyl ester	Liquid	64-67-5	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Sulfuric acid dimethyl ester	Liquid	77-78-1	>480	>480	>480	6	<0.09	0.09	<43.2	>480	6
Sulfuric acid fuming (20% free SO ₃)	Liquid	8014-95-7	>480	>480	>480	6	<0.06	0.06	<28.8	>480	6
Sulfuric acid fuming (40% free SO ₃)	Liquid	8014-95-7	130*/220	455*/468	>480	6	0.32	0.0001			
Sulfuric acid fuming (65% free SO ₃)	Liquid	8014-95-7	180	248	370	5	na	0.04	398	428	5
Sulfuryl chloride	Liquid	7791-25-5	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Tabun (GA), FINABEL 0.7.C	Liquid	77-81-6		>1400 ⁸							
Tabun (GA), MIL-STD-282 (100 g/m ²)	Liquid	77-81-6		>480 ⁸							
Tetrachloro bisphenol-A, 2,2',6,6'-	Solid	79-95-8	>480	>480	>480	6	<0.1	0.1	<48	>480	6
Tetrachloro ethane, 1,1,2,2,-	Liquid	79-34-5	>480	>480	>480	6	<0.008	0.008	<3.8	>480	6
Tetrachloro ethylene, 1,1,2,2,-	Liquid	127-18-4	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Tetrachloro methane	Liquid	56-23-5	imm	imm*/11	>480	6	0.57	0.001			
Tetrachloro methane (1000 ppm)	Vapor	56-23-5	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Tetraethylene pentamine	Liquid	112-57-2	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Tetrafluoroethane, 1,1,1,2,-	Vapor	811-97-2	>480	>480	>480	6	<0.04	0.04	<19.2	>480	6
Tetrahydrofuran	Liquid	109-99-9	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Tetramethyl ammonium hydroxide (25%)	Liquid	75-59-2	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Thiazol, 1,3,-	Liquid	288-47-1	>480	>480	>480	6	<0.04	0.04	<19.2	>480	6
Thioalkohol	Liquid	75-08-1	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Thioglycolic acid	Liquid	68-11-1	>480	>480	>480	6	<0.0001	0.0001	<0.04	>480	6

TECHNICAL DATA SHEET

HAZARD / CHEMICAL NAME	PHYSICAL STATE	CAS	BT ACT	BT 0.1	BT 1.0	EN	SSPR	MDPR	CUM 480	TIME 150	ISO
Thionyl chloride	Liquid	7719-09-7	21	21	33	2	nm	0.1	nm	47	2
Thiophene	Liquid	110-02-1	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Tin chloride, mono-n-butyl	Liquid	1118-46-3	>480	>480	>480	6	<0.0001	0.0001	<0.04	>480	6
Tin chloride, tri-n-butyl	Liquid	1461-22-9		nm	>480	6	nm	0.2			
Titan(IV) chloride	Liquid	7550-45-0	>480	>480	>480	6	<0.0001	0.0001	<0.04	>480	6
Titanium (IV) isopropoxide	Liquid	546-68-9	>480	>480	>480	6	<0.1	0.002	0	>480	6
Titanium tetrachloride	Liquid	7550-45-0	>480	>480	>480	6	<0.0001	0.0001	<0.04	>480	6
Toluene	Liquid	108-88-3	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Toluene diisocyanate, 2,4-	Liquid	584-84-9	>480	>480	>480	6	<0.0281	0.0281	<13.5	>480	6
Toluene diisocyanate, 2,4- (80%)	Liquid	584-84-9	>480	>480	>480	6	<0.0281	0.0281	<13.5	>480	6
Toluidine, o-	Liquid	95-53-4	>480	>480	>480	6	<0.03	0.03	<14.4	>480	6
Tributyl amine (95%)	Liquid	102-82-9	>480	>480	>480	6	<0.04	0.04	<19.2	>480	6
Tributyl phosphate	Liquid	126-73-8	>480	>480	>480	6	<0.1	0.037	0	>480	6
Trichloro acetic acid (sat)	Liquid	76-03-9	>480	>480	>480	6	<0.03	0.03	<14.4	>480	6
Trichloro acetone, 1,1,3- (87.7%)	Liquid	921-03-9	431*/458	467*/476	>480	6	<0.2	0.05	<24	>480	6
Trichloro benzene, 1,2,4-	Liquid	120-82-1	>480	>480	>480	6	<0.001	0.001	<0.48	>480	6
Trichloro ethane, 1,1,2-	Liquid	79-00-5	120*/173	164*/232	202*/302	4	9.1	0.01			
Trichloro ethanol, 2,2,2-	Liquid	115-20-8	>480	>480	>480	6	<0.008	0.008	<3.8	>480	6
Trichloro ethylene	Liquid	79-01-6	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Trichloro methane	Liquid	67-66-3	imm	imm	imm		10.6	0.001			
Trichloro methane (1000 ppm)	Vapor	67-66-3	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Trichloro phenylsilane	Liquid	98-13-5	>480	>480	>480	6	<0.0001	0.0001	<0.04	>480	6
Triethyl amine	Liquid	121-44-8	>480	>480	>480	6	0.05	0.05	<24	>480	6
Triethylenetetramine (60%)	Liquid	112-24-3	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Trifluoro acetic acid	Liquid	76-05-1	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Trifluoro methansulfonic acid	Liquid	1493-13-6	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Trimethyl chinon (30 °C, molten)	Liquid	935-92-2		nm	>480	6	nm	0.05			
VX Nerve Agent, FINABEL 0.7.C	Liquid	50782-69-9		>1400 ⁸							
VX Nerve Agent, MIL-STD-282 (100 g/m ²)	Liquid	50782-69-9		>480 ⁸							
Vinyl acetate	Liquid	108-05-4	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Vinyl benzol	Liquid	100-42-5	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Vinyl carbinol	Liquid	107-18-6	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Vinyl chloride	Vapor	75-01-4	imm	>480	>480	6	0.02	0.001	<9.6	>480	6
Vinyl cyanide	Liquid	107-13-1	72*/91	73*/92	103	3	8.9	0.0085			
Vinyl ethylene (gaseous)	Vapor	106-99-0	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Vinylidene chloride	Liquid	75-35-4	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
White Liquor	Liquid	mix		>480							
White spirit	Liquid	mix	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Xylene, mixed isomers	Liquid	1330-20-7	>480	>480	>480	6	<0.001	0.001	<0.48	>480	6
Xylidine, 2,4-	Liquid	95-68-1	>480	>480	>480	6	<0.0195	0.0195	<9.4	>480	6

BTAct (Actual) Breakthrough time at MDPR [mins] | BT0.1 Normalized breakthrough time at 0.1 µg/cm²/min [mins] |

BT1.0 Normalized breakthrough time at 1.0 µg/cm²/min [mins] | EN Classification according to EN 14325 | SSPR Steady state permeation rate [µg/cm²/min] |

MDPR Minimum detectable permeation rate [$\mu\text{g}/\text{cm}^2/\text{min}$] | CUM480 Cumulative permeation mass after 480 mins [$\mu\text{g}/\text{cm}^2$] |
 Time150 Time to reach cumulative permeation mass of 150 $\mu\text{g}/\text{cm}^2$ [mins] | ISO Classification according to ISO 16602 |
 CAS Chemical abstracts service registry number | min Minute | > Larger than | < Smaller than | imm Immediate (< 10 min) | nm Not tested |
 sat Saturated solution | N/A Not Applicable | na Not attained | GPR grade General purpose reagent grade | * Based on lowest single value |
 8 Actual breakthrough time; normalized breakthrough time is not available | DOT5 Degradation after 5 min | DOT30 Degradation after 30 min |
 DOT60 Degradation after 60 min | DOT240 Degradation after 240 min | BT1383 Normalized breakthrough time at 0.1 $\mu\text{g}/\text{cm}^2/\text{min}$ [mins] acc. ASTM F1383 |

Important Note

Die veröffentlichten Permeationsdaten wurden von unabhängigen, akkreditierten Testlaboren entsprechend der zum betreffenden Zeitpunkt jeweils geltenden Testmethode (EN ISO 6529 (Methoden A und B), ASTM F739, ASTM F1383, ASTM D6978, EN369, EN 374-3) für DuPont generiert. Die Daten stellen in der Regel den Durchschnittswert von drei getesteten Materialproben dar. Alle Chemikalien wurden anhand einer Probe von mehr als 95 % (w/w) getestet, sofern nicht anders angegeben. Die Tests wurden zwischen 20 °C und 27 °C und unter Umgebungsdruck durchgeführt, sofern nicht anders angegeben. Eine hiervon abweichende Temperatur kann erheblichen Einfluss auf die Durchbruchzeit haben. Die Permeation nimmt in der Regel mit steigender Temperatur zu. Die kumulativen Permeationsdaten wurden gemessen oder auf Basis der niedrigsten nachweisbaren Permeationsrate berechnet. Die Tests auf Zytostatika wurden bei einer Testtemperatur von 27 °C nach ASTM D6978 oder ISO 6529 durchgeführt, mit der zusätzlichen Anforderung, eine normale Durchbruchzeit bei 0,01 $\mu\text{g}/\text{cm}^2/\text{min}$ aufzuzeichnen. Chemische Kampfstoffe (Lewisit, Sarin, Soman, Senfgas, Tabun und Nervengas VX) wurden nach MIL-STD-282 bei 22 °C oder nach FINABEL 0.7 bei 37 °C durchgeführt. Die Permeationsdaten für Tyvek® sind ausschließlich für weißes Tyvek® 500 und Tyvek® 600 gültig. Sie sind nicht für andere Tyvek®-Ausführungen oder -Farben gültig. Permeationsdaten werden gewöhnlich für einzelne Chemikalien getestet. Die Permeationsmerkmale von Mischungen können sich häufig beträchtlich vom Verhalten der einzelnen Chemikalien unterscheiden. Die veröffentlichten Permeationsdaten für Handschuhe wurden nach ASTM F739 und ASTM F1383 generiert. Die veröffentlichten Degradationsdaten für Handschuhe wurden auf Grundlage einer gravimetrischen Methode generiert.

Bei dieser Art von Degradationstests wird eine Seite des Handschuhmaterials vier Stunden lang der Testchemikalie ausgesetzt. Der Prozentsatz der Gewichtsveränderung nach der Aussetzung wird in vier Zeitintervallen gemessen: 5, 30, 60 und 240 Minuten. Degradationseinstufungen:

- E: EXCELLENT (Ausgezeichnet, 0–10 % Gewichtsveränderung)
- G: GOOD (GUT, 11–20 % Gewichtsveränderung)
- F: FAIR (Ausreichend, 21–30 % Gewichtsveränderung)
- P: POOR (Gering, 31–50 % Gewichtsveränderung)
- NR: NOT Recommended (Nicht Empfohlen, Mehr als 50 % Gewichtsveränderung)
- NT: NOT TESTED (NICHT GETESTET)

Als Degradation wird die physische Veränderung eines Materials nach einer Aussetzung gegenüber Chemikalien bezeichnet. Zu den Effekten, die typischerweise beobachtet werden können, gehören Anschwellen, Faltenbildung, Verschlechterung (der Eigenschaften) oder Delaminierung. Es kann auch zu Verlusten der Reißfestigkeit kommen.

Bitte verwenden Sie die angegebenen Permeationsdaten im Rahmen der Risikobewertung, um die Auswahl eines für Ihre Anwendung geeigneten Schutzgewebes, Schutzkleidungsstücks, Handschuhs oder Zubehörs zu unterstützen. Die Durchbruchzeit ist nicht mit der Zeit identisch, während der ein Kleidungsstück sicher getragen werden kann. Durchbruchzeiten zeigen die Barrierewirkung an. Die Ergebnisse können jedoch je nach Testmethode und Testlabor unterschiedlich sein. Die Durchbruchzeit alleine ist nicht ausreichend, um zu ermitteln, wie lange ein Kleidungsstück nach einer Kontamination weiter getragen werden kann. Die Zeit, während der ein Benutzer das betreffende Kleidungsstück sicher tragen kann, kann kürzer oder länger sein, abhängig vom Permeationsverhalten und der Toxizität der Substanz, den Arbeitsbedingungen und den Aussetzungsbedingungen (z. B. Temperatur, Druck, Konzentration, physischer Zustand).

Letzte Aktualisierung der Permeationsdaten: 10/24/2022

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This garment and/or fabric are not flame resistant and should not be used around heat, open flame, sparks or in potentially flammable environments.

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