C3199T TN

Tychem® 5000

DuPont™ Tychem® 5000 Coverall. Certified to NFPA 1992. Respirator Fit Hood. Elastic Wrists. Attached Socks with Outer Boot Flaps. Double Storm Flap with Hook & Loop Closure. Taped Seams. Tan.

Name	Description
Full Part Number	C3199TTNxx0006yy (xx=size;yy=option code)
Fabric/Materials	Tychem® 5000
Design	Coverall w/ Resp. Fit Hood, Elastic Wrists, Att. Socks w/ Outer Boot Flaps. Certified to NFPA 1992
Seam	Taped
Color	Tan
Quantity/Box	6 per case

FEATURES & PRODUCT DETAILS

Tychem® 5000 fabric is composed of a multi-layer film barrier laminated to a durable 2.0 oz/yd^2 polypropylene substrate. Tychem® CPF3 fabric is strong and durable for rigorous activities and rugged situations involving liquid splash and provides barrier to a broad range of chemicals. Typical Applications: chemical handling, petro-chemical, hazardous materials/waste clean-up, fire departments, industrial hazmat teams, utilities, and domestic preparedness. Commonly used in domestic preparedness for situations where the potential to exposure to chemicals exist.

- Certified compliant to the 2018 edition of NFPA 1992, Standard on Liquid Splash-Protective Ensembles and Clothing for Hazardous Materials Emergencies by an independent third party certifying organization.
- Taped seams provide strong chemical resistance against heavy liquid splashes. A sewn seam is covered with a strip of compatible chemical-resistant material through heat sealing.
- Three-piece hood design with longer zipper that extends to chin for complete coverage of neck area and good fit around a respirator
- Larger zipper pull is easier to grasp for easier donning and doffing
- Storm flap covers zipper which can be secured by the wearer with rugged hook and loop material to prevent intrusion at zipper
- Dolman sleeve design for greater range of motion and comfort.
- Elastic opening for tighter fit at wrist
- Integrated socks composed of garment material
- Attached flaps are designed to cover boot tops to help reduce potential for liquid intrusion

FINISHED DIMENSIONS

Size	Sleeve Length	Chest Width	Inseam	Fits Chest	Fits Height	Boot Length
SM	32 1/2	23	27 1/4	32 3/4 - 36 1/4	5'0" - 5'7"	15
MD	33	25	28	36 3/4 - 40 1/4	5'3" - 5'7"	15
LG	33 3/4	27	29	40 3/4 - 44 1/4	5'5" - 5'9"	15
XL	36	29	29 1/2	44 3/4 - 48 1/4	5'8" - 6'2"	15
2X	36 1/2	31	30	48 3/4 - 52 1/4	6'0" - 6'4"	15
3X	37	33	31 1/4	52 3/4 - 56 1/4	6'2" - 6'4"	15
4X	37 3/4	35	32 1/4	56 3/4 - 60 1/4	6'4" - 6'7"	15
5X	38 3/4	37	33	60 3/4 - 64 1/4	6'7" - 6'10"	15 1/2

ADDITIONAL EQUIPMENT NEEDED

- Please read, understand and follow the Tychem® User Manual.
- Please refer to the technical data package for each garment with NFPA certification for specific equipment that has been tested and certified for use with that garment.
- Wear other appropriate PPE such as, but not limited to, respiratory, eye, head, hand, and foot protection based on the hazard assessment.
- Wear separate appropriate outer footwear over the garment sock. This garment has attached socks made of garment material. These socks are not suitable to used as outer footwear. They do not have adequate durability or slip resistance to be worn as the outer foot covering. (15)

AVAILABLE OPTIONS

Option Code	Description	Sizes	Part Number
00	Standard	SM,MD,LG,XL,2X,3X,4X,5X	

SPECIFICATIONS

- The garment shall be constructed of DuPont™ Tychem® 5000 -- a multi-layer composite barrier film laminated to a durable 2.0 oz/yd^2 polypropylene substrate.
- The garment shall be a hooded coverall design.
- The garment shall have a respirator fit hood with elastic around the face.
- The garment shall have a front zipper closure.
- The garment shall have elastic wrists.

SIZES

Article Number	Product Size
	SM
	MD
	LG
	XL
	2X
	3X
	4X
	5X

Physical Properties

Data relating to mechanical performance of the fabrics used in DuPont chemical protective clothing, listed for the selected garment according to the test methods and relevant European standard, if applicable. Such properties, including abrasion and flex-cracking resistance, tensile strength and puncture resistance can help in the assessment of protective performance.

Property	Test Method	Typical Result
Basis Weight	ASTM D751	4.4 oz/yd^2
Breaking Strength - Grab (CD)	ASTM D751	59 lb_f
Breaking Strength - Grab (MD)	ASTM D751	62 lb_f
Puncture, Propagation, Tear Resistance (CD)	ASTM D5034	not available
Puncture, Propagation, Tear Resistance (MD)	ASTM D5034	not available
Tear Resistance - Trap Tear (CD)	ASTM D5597	30 lb_f
Tear Resistance - Trap Tear (MD)	ASTM D5597	21 lb_f
Thickness	ASTM D1117	18 mils
Wearing Apparel Flammability	16 CFR 1610	Class 1

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

WARNING

- The information provided herein corresponds to our knowledge on the subject at the date of its publication. This information may be subject to revision as new knowledge and experience becomes available. The data provided fall within the normal range of product properties and relate only to the specific material designated; these data may not be valid for such material used in combination with any other materials or additives or in any process, unless expressly indicated otherwise. The data provided should not be used to establish specification limits or used alone as the basis of design; they are not intended to substitute for any testing you may need to conduct to determine for yourself the suitability of a specific material for your particular purposes. Since DuPont cannot anticipate all variations in actual end-use conditions DuPont makes no warranties and assumes no liability in connection with any use of this information. Nothing in this publication is to be considered as a license to operate under or a recommendation to infringe any patent rights.

PERMEATION DATA

Permeation is the process by which a solid, liquid or gaseouses chemical moves through a protective clothing fabric at a molecular level. Permeation data assist in the selection of the most appropriate protective garment for a particular application and in the estimation of how long it can be safely worn. Standardised test methods are used to determine the resistance of DuPont materials to permeation, the results of which can be selected according to a specific chemical, chemical class or fabric.

Hazard / Chemical Name	Physical State	CAS	BT Act	BT 0.1	BT 1.0	EN	SSPR	MDPR	Cum 480	Time 150	ISO
Acetaldehyde	Liquid	75-07-0		19	>480	6	0.324	0.0071			
Acetic acid (>95%)	Liquid	64-19-7	34	34	45	2	<0.01	0.01	326	>240	5
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	<0.0139	0.0139	<6.7	>480	6
Acetic acid ethyl ester	Liquid	141-78-6	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Acetic acid pentyl ester	Liquid	628-63-7	>480	>480	>480	6	<0.08	0.08	<38.4	>480	6
Acetic anhydride	Liquid	108-24-7		>480	>480	6	<0.1	0.034			
Acetic chloride	Liquid	75-36-5	>480	>480	>480	6	<0.03	0.03	<14.4	>480	6
Acetone	Liquid	67-64-1	454	462			0.21	0.05			
Acetonitrile	Liquid	75-05-8		imm	>480	6	0.82	0.004			
Acetyl chloride	Liquid	75-36-5	>480	>480	>480	6	<0.03	0.03	<14.4	>480	6
Acrolein	Liquid	107-02-8	17*/29	25*/178	>480	6	0.17	0.05			
Acrylonitrile	Liquid	107-13-1	30	31	39	2	2.4	0.0085			
Acryloyl Chloride	Liquid	814-68-6	10*/37	55	82	3	<2.5	0.04	410	176	4
Adipic acid dinitrile	Liquid	111-69-3	>480	>480	>480	6	<0.09	0.09	<43.2	>480	6
Adipic acid nitrile	Liquid	111-69-3	>480	>480	>480	6	<0.09	0.09	<43.2	>480	6
Adiponitrile	Liquid	111-69-3	>480	>480	>480	6	<0.09	0.09	<43.2	>480	6
Allyl alcohol	Liquid	107-18-6	>480	>480	>480	6	<0.03	0.03	<14.4	>480	6
Allyl chloride	Liquid	107-05-1		12			1.3	0.001			
Amino benzene	Liquid	62-53-3		320			0.747	0.015			
Amino diphenyl, 4- (1 mg/ml in Methanol)	Liquid	92-67-1	>480	>480	>480	6	0.0273	<0.0273	<13	>480	6
Amino ethanol, 2-	Liquid	141-43-5		>480	>480	6	<0.1	0.034			
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		15			22	0.001			
Ammonia (-33 °C, liquid)	Liquid	7664-41-7	25	35	200	4	<2.4	0.04	150	>480	6
Ammonia (-70 °C, liquid)	Liquid	7664-41-7		>480	>480	6	<0.1	0.02			
Ammonia (gaseous)	Vapor	7664-41-7	imm	imm	imm		12.1	0.0024			

Hazard / Chemical Name	Physical State	CAS	BT Act	BT 0.1	BT 1.0	EN	SSPR	MDPR	Cum 480	Time 150	ISO
Ammonium chloride (sat)	Liquid	12125-02-9		>480	>480	6	<0.1	0.1			
Ammonium hydroxide (28% - 30%)	Liquid	1336-21-6		89			32	0.01			
Amyl acetate, n-	Liquid	628-63-7	>480	>480	>480	6	<0.08	0.08	<38.4	>480	6
Amyl alcohol	Liquid	71-41-0	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Amyl ester acetic acid	Liquid	628-63-7	>480	>480	>480	6	<0.08	0.08	<38.4	>480	6
Aniline	Liquid	62-53-3		320			0.747	0.015			
Anthracene (sat in Toluene)	Liquid	120-12-7	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Anthracin (sat in Toluene)	Liquid	120-12-7	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Azolidine	Liquid	123-75-1		342							
Benzenamine	Liquid	62-53-3		320			0.747	0.015			
Benzene	Liquid	71-43-2		>480	>480		<0.1	0.001			
Benzene carbonyl chloride	Liquid	98-88-4		>480	>480	6	<0.001	0.001			
Benzene sulfone chloride	Liquid	98-09-9	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Benzene sulfonyl chloride	Liquid	98-09-9	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Benzo nitrile	Liquid	100-47-0	420	450	>480	6	0.31	0.01			
Benzo trichloride	Liquid	98-07-7		>480							
Benzoyl chloride	Liquid	98-88-4		>480	>480	6	<0.001	0.001			
Benzyl chloride	Liquid	100-44-7		>480	>480		<0.1	0.001			
Benzyl chloro formate	Liquid	501-53-1		>480	>480	6	<0.1	0.034			
Benzyl cyanide	Liquid	140-29-4	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Black Liquor (mix)	Liquid	mix		>480							
Boron trifluoride dimethyl etherate	Liquid	353-42-4	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Bromine	Liquid	7726-95-6	imm	imm	imm		86.2	0.01			
Bromo 4-fluorobenzene, 1-	Liquid	460-00-4	>480	>480	>480	6	<0.06	0.06	<28.8	>480	6
Bromo fluorobenzene, 4-	Liquid	460-00-4	>480	>480	>480	6	<0.06	0.06	<28.8	>480	6
Butadiene, 1,3- (gaseous)	Vapor	106-99-0	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Butanol, 1-	Liquid	71-36-3		>480	>480	6	<0.1	0.001			
Butanol, n-	Liquid	71-36-3		>480	>480	6	<0.1	0.001			
Butanone	Liquid	78-93-3		>480	>480	6	<0.1	0.001			
Butyl acetate, n-	Liquid	123-86-4	>480	>480	>480	6	<0.05	0.05	<24	>480	6

Hazard / Chemical Name	Physical State	CAS	BT Act	BT 0.1	BT 1.0	EN	SSPR	MDPR	Cum 480	Time 150	ISO
Butyl alcohol, n-	Liquid	71-36-3		>480	>480	6	<0.1	0.001			
Butyl amine	Liquid	109-73-9		>480	>480	6	<0.1	0.1			
Butyl ether, n-	Liquid	142-96-1	116	117	121	4	12.2	0.021			
Carbon disulfide	Liquid	75-15-0	imm	imm	imm		0.83	0.05			
Carbon tetrachloride	Liquid	56-23-5	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Caustic ammonia (28% - 30%)	Liquid	1336-21-6		89			32	0.01			
Caustic soda (50%)	Liquid	1310-73-2	>480	>480	>480	6	<0.1	0.01	<4.8	>480	6
Cellosolve acetate	Liquid	110-80-5	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Chlor allylene	Liquid	107-05-1		12			1.3	0.001			
Chlordane (44%)	Liquid	57-74-9		>480	>480	6	<0.1	0.017			
Chlorine (-70 °C, liquid)	Liquid	7782-50-5		>480	>480	6	<0.01	0.01			
Chlorine (gaseous)	Vapor	7782-50-5	imm	imm	imm		1.19	0.05			
Chlorine sulfide (80%)	Liquid	10545-99-0		imm			>41.3	0.083			
Chloro 1-methylbenzene, 2-	Liquid	95-49-8		>480	>480	6	<0.0001	0.0001			
Chloro 2,3-epoxy propane, 1-	Liquid	106-89-8		36*/67			2.1	0.001			
Chloro acetic acid (80%)	Liquid	79-11-8	>480	>480	>480	6	0.038	0.038	<18.3	>480	6
Chloro acetone (95%)	Liquid	78-95-5	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Chloro acetyl chloride	Liquid	79-04-9		77			1.026	0.001			
Chloro acrylonitrile, 2-	Liquid	920-37-6		146	>480	6	0.11	0.0141			
Chloro benzene	Liquid	108-90-7		63			0.7	0.001			
Chloro benzotrichloride, 4-	Liquid	5216-25-1		>480							
Chloro benzotrifluoride, 4-	Liquid	98-56-6		460							
Chloro ethanol, 2-	Liquid	107-07-3	>480	>480	>480	6	<0.04	0.04	<19.2	>480	6
Chloro ethene	Vapor	75-01-4		>480	>480	6	<0.1	0.0019			
Chloro prene, 3-	Liquid	107-05-1		12			1.3	0.001			
Chloro propan-2-one, 1- (95%)	Liquid	78-95-5	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Chloro toluene, alpha-	Liquid	100-44-7		>480	>480		<0.1	0.001			
Chloro toluene, o-	Liquid	95-49-8		>480	>480	6	<0.0001	0.0001			
Chloroform	Liquid	67-66-3		imm	imm		24	0.001			
Chlorsulfonic acid	Liquid	7790-94-5		330			0.97	0.1			

Hazard / Chemical Name	Physical State	CAS	BT Act	BT 0.1	BT 1.0	EN	SSPR	MDPR	Cum 480	Time 150	ISO
Citric acid (50%)	Liquid	77-92-9		>480	>480	6	<0.1	0.062			
Cresol o-	Liquid	95-48-7	196	198	216	4	8.1	0.0174			
Cumene	Liquid	98-82-8	354	364	396	5	1.5	0.02			
Cyanobenzene	Liquid	100-47-0	420	450	>480	6	0.31	0.01			
Cyanoethylene	Liquid	107-13-1	30	31	39	2	2.4	0.0085			
Cyanomethane	Liquid	75-05-8		imm	>480	6	0.82	0.004			
Cyclo hexane	Liquid	110-82-7	>480	>480	>480	6	<0.07	0.07	<33.6	>480	6
Cyclo octadiene	Liquid	1552-12-1	19	>480	>480	6	<0.01	0.001			
DEHP	Liquid	117-81-7		>480	>480	6	<0.1	0.0629			
Diaminoethane, 1,2-	Liquid	107-15-3	>480	>480	>480	6	<0. 0097	0.0097	<4.7	>480	6
Dibromo -3-chloropropane, 1,2-	Liquid	96-12-8		>480							
Dibromoethane, 1,2-	Liquid	106-93-4	>480	>480	>480	6	<0.03	0.03	<14.4	>480	6
Dichlorbenzen, 1,2-	Liquid	95-50-1	>480	>480	>480	6	<0.007	0.007	<3.4	>480	6
Dichlorbenzen, 1,3-	Liquid	541-73-1	imm	>480	>480	6	0.01	0.005			
Dichlorbenzen, 1,4- (50% in Ethanol)	Liquid	106-46-7	33	131	>480	6	0.13	0.005	<16.1	>480	6
Dichlorethane, 1.2.-	Liquid	107-06-2		>480	>480	6	<0.1	0.001			
Dichloro ethyl ether	Liquid	111-44-4	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Dichloro ethylene, 1,1-	Liquid	75-35-4	150	170	330	5	1	0.01			
Dichloro methane	Liquid	75-09-2		imm	imm		>11	0.001			
Dichloro propene, 1,3- (95%)	Liquid	542-75-6		imm	imm		103	0.004			
Dichloro propene, 2,3-	Liquid	78-88-6		280							
Dicyanobutane, 1,4-	Liquid	111-69-3	>480	>480	>480	6	<0.09	0.09	<43.2	>480	6
Diesel fuel	Liquid	68334-30-5	199	199	>480	6	0.47	0.08			
Diethanolamine	Liquid	111-42-2		>480	>480	6	<0.1	0.017			
Diethyl amine	Liquid	109-89-7	210	>480	>480	6	<0.1	0.05			
Diethyl aniline, N,N-	Liquid	91-66-7	>480	>480	>480	6	<0.024	0.024	<11.5	>480	6
Diethyl ether	Liquid	60-29-7	>480	>480	>480	6	<0.03	0.03	<14.4	>480	6
Diethyl hexyl phthalate	Liquid	117-81-7		>480	>480	6	<0.1	0.0629			
Diethyl sulfate	Liquid	64-67-5	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Diethylene triamine	Liquid	111-40-0	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6

Hazard / Chemical Name	Physical State	CAS	BT Act	BT 0.1	BT 1.0	EN	SSPR	MDPR	Cum 480	Time 150	ISO
Diisopropylethylamine (DIPEA)	Liquid	7087-68-5	>480	>480	>480	6	<0.018	0.018	<8.6	>480	6
Dimethyl acetamide, N,N-	Liquid	127-19-5	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Dimethyl amine	Vapor	124-40-3		>480	>480	6	<0.01	0.01			
Dimethyl aniline, N,N-	Liquid	121-69-7	imm	imm	15	1	>2	0.01			
Dimethyl formamide, N,N-	Liquid	68-12-2	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Dimethyl ketal	Liquid	67-64-1	454	462			0.21	0.05			
Dimethyl ketone	Liquid	67-64-1	454	462			0.21	0.05			
Dimethyl maleate	Liquid	624-48-6		>480	>480	6	<0.1	0.042			
Dimethyl phenylamine, N,N-	Liquid	121-69-7	imm	imm	15	1	>2	0.01			
Dimethyl sulfate	Liquid	77-78-1	>480	>480	>480	6	<0.03	0.03	<14.4	>480	6
Dimethyl sulfide	Liquid	75-18-3	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Dimethyl sulfoxide	Liquid	67-68-5	>480	>480	>480	6	<0.03	0.03	<14.4	>480	6
Dioxane, 1,4-	Liquid	123-91-1	>480	>480	>480	6	<0.06	0.06	<28.8	>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
Disodium sulfide (60% (slurry))	Liquid	1313-82-2		>480	>480	6	<0.052	0.052			
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		36*/67			2.1	0.001			
Epoxy ethane (11 °C, liquid)	Liquid	75-21-8		18	>480	6	0.21	0.0044			
Epoxy ethane (gaseous)	Vapor	75-21-8	12	12	17	1	<0.01	0.01	182	>360	5
Epoxy propane, 1,2-	Liquid	75-56-9	35	47	>480	6	<0.7	0.03	214	366	5
Ethane dioic acid (sat)	Liquid	144-62-7		>480	>480	6	<0.1	0.1			
Ethane nitrile	Liquid	75-05-8		imm	>480	6	0.82	0.004			
Ethane thiol	Liquid	75-08-1	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Ethanol	Liquid	64-17-5	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Ethanol amine	Liquid	141-43-5		>480	>480	6	<0.1	0.034			
Ethanoyl chloride	Liquid	75-36-5	>480	>480	>480	6	<0.03	0.03	<14.4	>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

Hazard / Chemical Name	Physical State	CAS	BT Act	BT 0.1	BT 1.0	EN	SSPR	MDPR	Cum 480	Time 150	ISO
Ethyl acetate	Liquid	141-78-6	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Ethyl alcohol	Liquid	64-17-5	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Ethyl benzene	Liquid	100-41-4	>480	>480	>480	6	<0.03	0.03	<14.4	>480	6
Ethyl ethanamine, N-	Liquid	109-89-7	210	>480	>480	6	<0.1	0.05			
Ethyl ether	Liquid	60-29-7	>480	>480	>480	6	<0.03	0.03	<14.4	>480	6
Ethyl glycol acetate	Liquid	111-15-9	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Ethyl mercaptan	Liquid	75-08-1	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Ethyl nitrile	Liquid	75-05-8		imm	>480	6	0.82	0.004			
Ethylene chlorohydrin	Liquid	107-07-3	>480	>480	>480	6	<0.04	0.04	<19.2	>480	6
Ethylene diamine	Liquid	107-15-3	>480	>480	>480	6	<0.0097	0.0097	<4.7	>480	6
Ethylene dibromide	Liquid	106-93-4	>480	>480	>480	6	<0.03	0.03	<14.4	>480	6
Ethylene dichloride	Liquid	107-06-2		>480	>480	6	<0.1	0.001			
Ethylene glycol acrylate	Liquid	818-61-1		>480	>480	6	<0.1	0.017			
Ethylene glycol mono ethyl ether acetate	Liquid	111-15-9	>480	>480	>480	6	<0.005	0.005	<2.4	>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		405	>480	6	0.146	0.0123			
Ethylene glycol monomethyl ether acetate	Liquid	110-49-6	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Ethylene oxide (11 °C, liquid)	Liquid	75-21-8		18	>480	6	0.21	0.0044			
Ethylene oxide (gaseous)	Vapor	75-21-8	12	12	17	1	<0.01	0.01	182	>360	5
Ethylene tetrachloride	Liquid	127-18-4	>480	>480	>480	6	<0.0267	0.0267	12	>480	6
Ethylene trichloride	Liquid	79-01-6	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Fluorobenzene	Liquid	462-06-6	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Fluorosilicic acid (33-35%)	Liquid	16961-83-4	>480	>480	>480	6	<0.1	0.1	<48	>480	6
Formaldehyde (37%)	Liquid	50-00-0		>480	>480	6	<0.1	0.001			
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	6	<0.1	0.001			
Formic acid (>95%)	Liquid	64-18-6	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Furaldehyde, 2-	Liquid	98-01-1		>480	>480	6	<0.1	0.017			
Furfural	Liquid	98-01-1		>480	>480	6	<0.1	0.017			
Gasoline, unleaded	Liquid	86290-81-5	>480	>480	>480	6	<0.05	0.05	<24	>480	6

Hazard / Chemical Name	Physical State	CAS	BT Act	BT 0.1	BT 1.0	EN	SSPR	MDPR	Cum 480	Time 150	ISO

Glycol chlorohydrin	Liquid	107-07-3	>480	>480	>480	6	<0.04	0.04	<19.2	>480	6
Green Liquor (mix)	Liquid	mix		>480							
Heptane	Liquid	142-82-5		>480	>480	6	<0.1	0.034			
Hexamethylene diamine (50 °C, molten)	Liquid	124-09-4	45	45	50	2	9.3	0.01			
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
Hexone	Liquid	108-10-1	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
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	<0.01	0.01	<4.8	>480	6
Hydrochloric acid (37%)	Liquid	7647-01-0		>480	>480	6	0.0425	0.001			
Hydrofluoric acid (48-51%)	Liquid	7664-39-3	204*/388	>480	>480	6	<0.08	0.025	<7.5	>480	6
Hydrofluoric acid (70%)	Liquid	7664-39-3	98	126	269	5	<2	0.04	346	323	5
Hydrogen chloride (gaseous)	Vapor	7647-01-0	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Hydrogen cyanide (27 °C, gaseous)	Vapor	74-90-8		30			1.09	0.0272			
Hydrogen fluoride (20-27 °C, gaseous)	Vapor	7664-39-3	184	186	189	4	40.1	0.0008			
Hydrogen peroxide (50%)	Liquid	7722-84-1	>480	>480	>480	6	<0.025	0.025	<12	>480	6
Hydrogen sulfide	Vapor	7783-06-4		imm			1.8	0.077			
Hydroxy 1,2,3-propanetricarboxylic acid, 2- (50%)	Liquid	77-92-9		>480	>480	6	<0.1	0.062			
Hydroxy toluene, o-	Liquid	95-48-7	196	198	216	4	8.1	0.0174			
Hypophosphorus acid (50%)	Liquid	6303-21-5		>480	>480	6	<0.01	0.01			
Isobutyl methyl ketone	Liquid	108-10-1	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Isopropanol	Liquid	67-63-0	>480	>480	>480	6	<0.0097	0.0097	<4.7	>480	6
Isopropyl alcohol	Liquid	67-63-0	>480	>480	>480	6	<0.0097	0.0097	<4.7	>480	6
Isopropyl amine	Liquid	75-31-0		15			22	0.001			
Isopropyl benzene	Liquid	98-82-8	354	364	396	5	1.5	0.02			
JP-8 Jet Fuel	Liquid	94114-58-6		>480	>480	6	<0.1	0.036			
Kerosene	Liquid	8008-20-6	>480	>480	>480	6	<0.1	0.1	<48	>480	6
Ketone propane	Liquid	67-64-1	454	462			0.21	0.05			
Lewisite (L), MIL-STD-282 (10 g/m^2)	Liquid	541-25-3		120[8]							
Limonene d-	Liquid	5989-27-5	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6

Hazard / Chemical Name	Physical State	CAS	BT Act	BT 0.1	BT 1.0	EN	SSPR	MDPR	Cum 480	Time 150	ISO
MEK	Liquid	78-93-3		>480	>480	6	<0.1	0.001			
Mercapto acetic acid	Liquid	68-11-1	30	>480	>480	6	0.08	0.01			
Mercury	Liquid	7439-97-6	>480	>480	>480	6	<0.09	0.09	<43.2	>480	6
Methacrylic acid	Liquid	79-41-4		81			1.7	0.0139			
Methanethiol	Vapor	74-93-1	>480	>480	>480	6	<0.08	0.08	<38.4	>480	6
Methanol	Liquid	67-56-1	imm	imm	>480	6	0.74	0.05			
Methoxy 2-methylpropane, 2-	Liquid	1634-04-4		>480	>480	6	<0.1	0.0021			
Methoxy ethanol, 2	Liquid	109-86-4		405	>480	6	0.146	0.0123			
Methoxy ethylacetate, 2-	Liquid	110-49-6	>480	>480	>480	6	<0.005	0.005	<2.4	>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 acetyl	Liquid	67-64-1	454	462			0.21	0.05			
Methyl amine (40%)	Liquid	74-89-5		140			8.03	0.001			
Methyl benzol	Liquid	108-88-3		>480	>480	6	<0.1	0.001			
Methyl chloride (gaseous)	Vapor	74-87-3	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Methyl chloroform	Liquid	71-55-6	>480	>480	>480	6	<0.025	0.025	<12	>480	6
Methyl cyanide	Liquid	75-05-8		imm	>480	6	0.82	0.004			
Methyl ethyl ketone	Liquid	78-93-3		>480	>480	6	<0.1	0.001			
Methyl formamide, N-	Liquid	123-39-7	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Methyl isocyanate	Liquid	624-83-9		12	>480	6	0.23	0.034			
Methyl ketone	Liquid	67-64-1	454	462			0.21	0.05			
Methyl mercaptan	Vapor	74-93-1	>480	>480	>480	6	<0.08	0.08	<38.4	>480	6
Methyl pentan-2-one, 4-	Liquid	108-10-1	>480	>480	>480	6	<0.02	0.02	<9.6	>480	6
Methyl propenoic acid, 2-	Liquid	79-41-4		81			1.7	0.0139			
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	6	<0.1	0.0021			
Methyl trichloromethane	Liquid	71-55-6	>480	>480	>480	6	<0.025	0.025	<12	>480	6
Methyl trichlorosilane	Liquid	75-79-6		>480	>480	6	<0.1	0.0241			
Methylene bromide	Liquid	74-95-3	20	40	140	4	>1.37	0.01			

Hazard / Chemical Name	Physical State	CAS	BT Act	BT 0.1	BT 1.0	EN	SSPR	MDPR	Cum 480	Time 150	ISO

Methylene chloride	Liquid	75-09-2		imm	imm		>11	0.001			
Methylene diphenyl diisocyanate, 4,4'- (50 °C, molten)	Liquid	101-68-8	>480	>480	>480	6	<0.0403	0.0403	<19.3	>480	6
N-Methylmorpholine (NMM)	Liquid	109-02-4	>480	>480	>480	6	<0.024	0.024	<11.5	>480	6
Naphthalene	Solid	91-20-3		>480	>480	6	<0.1	0.0064			
Naphthalene (25% in Diethylene glycol dimethylether)	Liquid	91-20-3	>480	>480	>480	6	<0.007	0.007	<3.4	>480	6
Nicotine	Liquid	54-11-5		>480	>480	6	<0.001	0.001			
Nitric acid (90%)	Liquid	7697-37-2	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Nitro benzene	Liquid	98-95-3		>480	>480	6	<0.1	0.001			
Nitro methane	Liquid	75-52-5		>480	>480	6	<0.1	0.0098			
Nitro propane, 2-	Liquid	79-46-9	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Norflurane	Vapor	811-97-2		>480	>480	6	<0.1	0.0041			
Oleum (65% free SO3)	Liquid	8014-95-7		15							
Oxalic acid (sat)	Liquid	144-62-7		>480	>480	6	<0.1	0.1			
PCB in transformer oil (mix)	Liquid	mix		>480	>480	6	<0.1	0.0415			
Pentanol, 1-	Liquid	71-41-0	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Pentyl acetate	Liquid	628-63-7	>480	>480	>480	6	<0.08	0.08	<38.4	>480	6
Peracetic Acid (32%)	Liquid	79-21-0	>480	>480	>480	6	<0.0123	0.0123	<6	>480	6
Phenethyl alcohol, 2-	Liquid	60-12-8	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Phenethylene	Liquid	100-42-5		>480	>480	6	<0.1	0.001			
Phenol (45 °C, molten)	Liquid	108-95-2	imm	17	21	1	<16	0.01	4870	68	3
Phenol (60 °C, molten)	Liquid	108-95-2	imm	imm	imm		<30	na	544/36 min	19	1
Phenol (85%)	Liquid	108-95-2	297	341	>480	6	<0.01	0.01	<4.8	>480	6
Phenyl acetonitrile	Liquid	140-29-4	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Phenyl amine	Liquid	62-53-3		320			0.747	0.015			
Phenyl chloride	Liquid	108-90-7		63			0.7	0.001			
Phenyl cyanide	Liquid	100-47-0	420	450	>480	6	0.31	0.01			
Phenyl ethane	Liquid	100-41-4	>480	>480	>480	6	<0.03	0.03	<14.4	>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	354	364	396	5	1.5	0.02			
Phosgene	Vapor	75-44-5	>480	>480	>480	6	<0.05	0.05	<24	>480	6

Hazard / Chemical Name	Physical State	CAS	BT Act	BT 0.1	BT 1.0	EN	SSPR	MDPR	Cum 480	Time 150	ISO
Phosphinic acid (50%)	Liquid	6303-21-5		>480	>480	6	<0.01	0.01			
Phosphoric acid (85%)	Liquid	7664-38-2	>480	>480	>480	6	<0.025	0.025	<12	>480	6
Phosphorus oxychloride	Liquid	10025-87-3	45	410	>480	6	0.22	0.01			
Phosphorus trichloride	Liquid	7719-12-2		>480	>480	6	<0.1	0.0332			
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
Polymethylene polyphenyle isocyanate (p-MDI)	Liquid	9016-87-9	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
Potassium carbonate (sat)	Liquid	584-08-7		>480	>480	6	<0.1	0.1			
Potassium hydroxide (45%)	Liquid	1310-58-3	>480	>480	>480	6	<0.023	0.023	<11	>480	6
Prop-2-en-1-al	Liquid	107-02-8	17* /29	25* /178	>480	6	0.17	0.05			
Propan -2-ol	Liquid	67-63-0	>480	>480	>480	6	<0. 0097	0.0097	<4.7	>480	6
Propan -2-one	Liquid	67-64-1	454	462			0.21	0.05			
Propen 1-ol, 2-	Liquid	107-18-6	>480	>480	>480	6	<0.03	0.03	<14.4	>480	6
Propenenitrile, 2-	Liquid	107-13-1	30	31	39	2	2.4	0.0085			
Propenoic acid nitrile	Liquid	107-13-1	30	31	39	2	2.4	0.0085			
Propyl amine, n-	Liquid	107-10-8		100			5.7	0.1			
Propyl bromide, n-	Liquid	106-94-5		>480	>480	6	<0.1	0.0198			
Propylene oxide, 1,2-	Liquid	75-56-9	35	47	>480	6	<0.7	0.03	214	366	5
Pyridine	Liquid	110-86-1	>480	>480	>480	6	<0.04	0.04	<19.2	>480	6
Pyroacetic ether	Liquid	67-64-1	454	462			0.21	0.05			
Pyrrolidine	Liquid	123-75-1		342							
Sarin (GB), MIL-STD-282 (10 g/m^2)	Liquid	107-44-8		120[8]							
Silicon tetrachloride	Liquid	10026-04-7		>480							
Sodium cyanide (45%)	Liquid	143-33-9	>480	>480	>480	6	<0.03	0.03	<14.4	>480	6
Sodium hydroxide (50%)	Liquid	1310-73-2	>480	>480	>480	6	<0.1	0.01	<4.8	>480	6
Sodium hypochlorite (15%)	Liquid	7681-52-9	>480	>480	>480	6	<0.03	0.03	<14.4	>480	6
Sodium metabisulphite (38%)	Liquid	7681-57-4		23			13.3	0.052			
Soman (GD), MIL-STD-282 (10 g/m^2)	Liquid	96-64-0		>480[8]							
Spiritus	Liquid	64-17-5	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Styrene	Liquid	100-42-5		>480	>480	6	<0.1	0.001			

Hazard / Chemical Name	Physical State	CAS	BT Act	BT 0.1	BT 1.0	EN	SSPR	MDPR	Cum 480	Time 150	ISO
Sulfur Mustard (HD), MIL-STD-282 (10 g /m^2)	Liquid	505-60-2		120[8]							
Sulfur trioxide	Liquid	7446-11-9	imm	imm	imm		>7600	0.01			
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	<0.03	0.03	<14.4	>480	6
Sulfuric acid fuming (65% free SO3)	Liquid	8014-95-7		15							
Sulfuryl chloride	Liquid	7791-25-5	35	120	440	5	0.93	0.01			
Sulphur dichloride (80%)	Liquid	10545-99-0		imm			>41.3	0.083			
Tetrachloro ethane, 1,1,2,2,-	Liquid	79-34-5	110	>480	>480	6	0.01	0.008	<3.8	>480	6
Tetrachloro ethylene, 1,1,2,2-	Liquid	127-18-4	>480	>480	>480	6	<0.0267	0.0267	12	>480	6
Tetrachloro methane	Liquid	56-23-5	>480	>480	>480	6	<0.01	0.01	<4.8	>480	6
Tetraethyl lead	Liquid	78-00-2		>480	>480	6	<0.1	0.002			
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	6	<0.1	0.0041			
Tetrahydrofuran	Liquid	109-99-9		>480	>480	6	<0.1	0.001			
Tetramethylethylene diamine (TMEDA)	Liquid	110-18-9	>480	>480	>480	6	<0.020	0.02	<9.6	>480	6
Thioglycolic acid	Liquid	68-11-1	30	>480	>480	6	0.08	0.01			
Thionyl chloride	Liquid	7719-09-7	15	15	15	1	420	0.01			
Titan(IV) chloride	Liquid	7550-45-0		120			>11.6	0.1			
Titanium tetrachloride	Liquid	7550-45-0		120			>11.6	0.1			
Toluene	Liquid	108-88-3		>480	>480	6	<0.1	0.001			
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
Tributyl amine (95%)	Liquid	102-82-9	>480	>480	>480	6	<0.018	0.018	<8.6	>480	6
Trichloro 1,2,2-trifluoroethane, 1,1,2-	Liquid	76-13-1		>480	>480	6	<0.1	0.001			
Trichloro benzene, 1,2,4-	Liquid	120-82-1	>480	>480	>480	6	<0.06	0.06	<28.8	>480	6
Trichloro ethane, 1,1,1-	Liquid	71-55-6	>480	>480	>480	6	<0.025	0.025	<12	>480	6
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	<0.02	0.02	<9.6	>480	6
Trichloro methane	Liquid	67-66-3		imm	imm		24	0.001			

Hazard / Chemical Name	Physical State	CAS	BT Act	BT 0.1	BT 1.0	EN	SSPR	MDPR	Cum 480	Time 150	ISO
Triethylentetramine (60%)	Liquid	112-24-3	>480	>480	>480	6	<0.005	0.005	<2.4	>480	6
VX Nerve Agent, MIL-STD-282 (10 g /m^2)	Liquid	50782-69-9		>480[8]							
Vinyl acetate	Liquid	108-05-4	>480	>480	>480	6	<0.0139	0.0139	<6.7	>480	6
Vinyl benzol	Liquid	100-42-5		>480	>480	6	<0.1	0.001			
Vinyl carbinol	Liquid	107-18-6	>480	>480	>480	6	<0.03	0.03	<14.4	>480	6
Vinyl chloride	Vapor	75-01-4		>480	>480	6	<0.1	0.0019			
Vinyl cyanide	Liquid	107-13-1	30	31	39	2	2.4	0.0085			
Vinyl ethylene (gaseous)	Vapor	106-99-0	>480	>480	>480	6	<0.05	0.05	<24	>480	6
Vinylidene chloride	Liquid	75-35-4	150	170	330	5	1	0.01			
White Liquor	Liquid	mix		>480							
Xylene, mixed isomers	Liquid	1330-20-7		>480	>480	6	<0.1	0.0171			
Xylene, o-	Liquid	95-47-6		>480	>480	6	<0.1	0.001			

Important Note.