



### PRODUCT INFORMATION

DuPont™ Tychem® 6000 AL TF630 WG. Ventilated coverall with stitched and over-taped seams. Fully enclosed over hood with clear front and crown see through visor. Front closure with double flap hook and loop, single zipper closing to center, horizontal opening. Three exhaust valves; two at hips one in hood back. Air distribution plenum made of Tychem® 6000 fabric. Emergency Egress. Attached non-dissipative under gloves. Integrated dissipative socks. Grey.

### ATTRIBUTES

|                   |                                                                                              |
|-------------------|----------------------------------------------------------------------------------------------|
| Full Part Number  | TF0630TGYWG                                                                                  |
| Fabric /Materials | Tychem® 6000                                                                                 |
| Design            | Air-fed coverall with attached non-dissipative under gloves and integrated dissipative socks |
| Seam              | Stitched and over-taped                                                                      |
| Color             | Grey                                                                                         |
| Sizes             | SM, MD, LG, XL, 2X, 3X                                                                       |
| Quantity/Box      | 2 per box, individually packed                                                               |

### FEATURES

- Certified according to Regulation (EU) 2016/425
- Chemical protective clothing, Category III, Type 3-B, 4-B and 6-B
- EN 14126 (barrier to infective agents).
- EN 1073-1 (ventilated protective clothing against particulate radioactive contamination)
- Antistatic treatment (EN 1149-5)
- Attached under gloves
- Integrated dissipative socks w/ conductive Tyvek® tape strip
- Simplified closure: easier donning procedure, minimal help from an assistant required
- Airline belt inside the suit: high reusability of the belt/air-regulator
- Visor with 180° panoramic view: clear vision, non-PVC, highly chemical resistant solution
- Top visor: in suit lighting and vision above suit; improved safety w/ secured sights and comfort
- Emergency egress strip: quick doffing in case of emergency (tear off at once)
- Fabric air plenum distributing cooling and breathing air for optimal comfort and reduced heat stress
- Simple breathing airline belt/regulator interface and installation: easy and quick installation set-up, no taping required
- Certified system made of Tychem® 6000 AL TF630 WG and DuPont air-belt, model 8000513914, to protect the worker according to EN 14594 (Respiratory protective devices - Continuous flow compressed air line breathing devices)

### SIZETABLE

| PRODUCT SIZE | ARTICLE NUMBER | ADDITIONAL INFO |
|--------------|----------------|-----------------|
| SM           | D15571094      |                 |
| MD           | D15571095      |                 |
| LG           | D15571096      |                 |
| XL           | D15571097      |                 |
| 2X           | D15571098      |                 |
| 3X           | D15571099      |                 |

## TECHNICAL DATA SHEET

### PHYSICAL PROPERTIES

| PROPERTY                                           | TEST METHOD          | TYPICAL RESULT              | EN               |
|----------------------------------------------------|----------------------|-----------------------------|------------------|
| Abrasion Resistance <sup>7</sup>                   | EN 530 Method 2      | >2000 cycles                | 6/6 <sup>1</sup> |
| Basis Weight                                       | DIN EN ISO 536       | 120 g/m <sup>2</sup>        | N/A              |
| Bursting Strength (Mullenburst)                    | ISO 2758             | 650 kPa                     | N/A              |
| Colour.                                            | N/A (598)            | Grey                        | N/A              |
| Flex Cracking Resistance <sup>7</sup>              | EN ISO 7854 Method B | >1000 cycles                | 1/6 <sup>1</sup> |
| Puncture Resistance                                | EN 863               | >10 N                       | 2/6 <sup>1</sup> |
| Resistance to water penetration                    | AATCC 127            | >30 kPa                     | N/A              |
| Surface Resistance at RH 25%, inside <sup>7</sup>  | EN 1149-1            | < 2,5 · 10 <sup>9</sup> Ohm | N/A              |
| Surface Resistance at RH 25%, outside <sup>7</sup> | EN 1149-1            | No antistatic treatment     | N/A              |
| Tensile Strength (MD)                              | DIN EN ISO 13934-1   | >100 N                      | 3/6 <sup>1</sup> |
| Tensile Strength (XD)                              | DIN EN ISO 13934-1   | >100 N                      | 3/6 <sup>1</sup> |
| Thickness (PPSH-249)                               | DIN EN ISO 534       | 220 µm                      | N/A              |
| Trapezoidal Tear Resistance (MD)                   | EN ISO 9073-4        | >20 N                       | 2/6 <sup>1</sup> |
| Trapezoidal Tear Resistance (XD)                   | EN ISO 9073-4        | >20 N                       | 2/6 <sup>1</sup> |

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 |  
N/A Not Applicable | STD DEV Standard Deviation |

### GARMENT PERFORMANCE

| PROPERTY                                                             | TEST METHOD              | TYPICAL RESULT | EN               |
|----------------------------------------------------------------------|--------------------------|----------------|------------------|
| Maximum inward leakage                                               | EN 14594                 | 0.05%          | 4A               |
| Minimal nominal protection factor <sup>7</sup>                       | EN 1073-1                | 50000          | 5/5              |
| Seam Strength                                                        | EN ISO 13935-2           | >125 N         | 4/6 <sup>1</sup> |
| Shelf Life <sup>7</sup>                                              | N/A.                     | 5 years        | N/A              |
| 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 6: Resistance to Penetration by Liquids (Low Level Spray Test)  | EN ISO 17491-4, Method A | Pass           | N/A              |

1 According to EN 14325 | 3 According to EN 1073-2 | 12 According to EN 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 | N/A Not Applicable | \* Based on lowest single value |

### COMFORT

| PROPERTY                         | TEST METHOD | TYPICAL RESULT | EN  |
|----------------------------------|-------------|----------------|-----|
| Air Permeability (Gurley method) | ISO 5636-5  | No             | N/A |

2 According to EN 14126 | 5 Front Tyvek® / Back | > Larger than | < Smaller than | N/A Not Applicable |

### PENETRATION AND REPELLENCY

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

## TECHNICAL DATA SHEET

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

1 According to EN 14325 | > Larger than | < Smaller than |

## BIOLOGICAL BARRIER

| PROPERTY                                                                        | TEST METHOD   | TYPICAL RESULT | EN               |
|---------------------------------------------------------------------------------|---------------|----------------|------------------|
| Resistance to Penetration by Biologically Contaminated Aerosols                 | ISO/DIS 22611 | log ratio >5   | 3/3 <sup>2</sup> |
| Resistance to Penetration by Blood and Body Fluids using Synthetic Blood        | ISO 16603     | 20 kPa         | 6/6 <sup>2</sup> |
| Resistance to Penetration by Blood-borne Pathogens using Bacteriophage Phi-X174 | ISO 16604     | 20 kPa         | 6/6 <sup>2</sup> |
| Resistance to Penetration by Contaminated Liquids                               | EN ISO 22610  | >75 min        | 6/6 <sup>2</sup> |
| Resistance to Penetration by Contaminated Solid Particles                       | ISO 22612     | log cfu <1     | 3/3 <sup>2</sup> |

1 According to EN 14325 | > Larger than | < Smaller than |

## PERMEATION DATA DUPONT™ TYCHEM® 6000 AL

| HAZARD / CHEMICAL NAME              | PHYSICAL STATE | CAS       | BT ACT   | BT 0.1   | BT 1.0   | EN | SSPR   | MDPR   | CUM 480 | TIME 150 | ISO |
|-------------------------------------|----------------|-----------|----------|----------|----------|----|--------|--------|---------|----------|-----|
| 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   |
| 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 <sup>2</sup> )     | 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 |         |          |     |

## 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 |
|-------------------------------------------|----------------|------------|----------|----------|----------|----|--------|--------|---------|----------|-----|
| 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   |
| 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   |

## 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 |
|------------------------------------------|----------------|------------|----------|----------|----------|----|---------|--------|---------|----------|-----|
| 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   |
| 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   |

## 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 |
|----------------------------------------------|----------------|------------|----------|----------|--------|----|--------|--------|---------|----------|-----|
| 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   |
| 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 form                                  | Liquid         | 67-66-3    | imm      | imm      | imm    |    | 10.6   | 0.001  |         |          |     |
| Chloro form (1000 ppm)                       | Vapor          | 67-66-3    | >480     | >480     | >480   | 6  | <0.05  | 0.05   | <24     | >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     |          |        |    |        |        |         |          |     |
| 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  |         |          |     |

## 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 |
|---------------------------------------------|----------------|------------|---------|---------|---------|----|---------|--------|---------|----------|-----|
| 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      |         |          |     |
| Dichlorobenzen, 1,2-                        | Liquid         | 95-50-1    | >480    | >480    | >480    | 6  | <0.005  | 0.005  | <2.4    | >480     | 6   |
| Dichlorobenzen, 1,3-                        | Liquid         | 541-73-1   | >480    | >480    | >480    | 6  | <0.005  | 0.005  | <2.4    | >480     | 6   |
| Dichlorobenzen, 1,4- (50% in Ethanol)       | Liquid         | 106-46-7   | >480    | >480    | >480    | 6  | <0.005  | 0.005  | <2.4    | >480     | 6   |
| 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   |
| Diketene Acetone (95%)                      | Liquid         | 5394-63-8  | >480    | >480    | >480    | 6  | <0.0229 | 0.0229 | <11     | >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 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   |

## 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 |
|------------------------------------------------------|----------------|------------|-----------|-----------|-----------|----|---------|--------|---------|----------|-----|
| 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   |
| 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 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 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   |

## 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 |
|------------------------------------------|----------------|------------|--------|---------|--------|----|---------|--------|---------|----------|-----|
| Ethylene glycol monomethyl ether         | Liquid         | 109-86-4   | >480   | >480    | >480   | 6  | <0.005  | 0.005  | <2.4    | >480     | 6   |
| 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   |

## 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 |
|---------------------------------------------------|----------------|------------|-------------------|-------------------|--------|----|---------|--------|---------|----------|-----|
| Hydrogen peroxide (70%)                           | Liquid         | 7722-84-1  | >480              | >480              | >480   | 6  | <0.02   | 0.02   | <9.6    | >480     | 6   |
| 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 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 <sup>8</sup> | >155 <sup>8</sup> |        |    |         |        |         |          |     |
| Lewisite (L), MIL-STD-282 (100 g/m <sup>2</sup> ) | Liquid         | 541-25-3   |                   | 360 <sup>8</sup>  |        |    |         |        |         |          |     |
| Limonene d-                                       | Liquid         | 5989-27-5  | >480              | >480              | >480   | 6  | <0.02   | 0.02   | <9.6    | >480     | 6   |
| 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   |
| 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   |
| Methyl 1,5-pentantedinitrile, 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-pyrrolidon, N-                           | Liquid         | 872-50-4   | >480              | >480              | >480   | 6  | <0.01   | 0.01   | <4.8    | >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 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   |
| 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   |
| 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   |

## 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 |
|-------------------------------|----------------|------------|----------|----------|--------|----|---------|--------|---------------|----------|-----|
| 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   |
| 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   |

## 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 |
|-------------------------------------------------|----------------|------------|--------|--------------------|----------|----|---------|--------|---------|----------|-----|
| 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 polyphenyle 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 <sup>2</sup> )           | 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 <sup>8</sup> |          |    |         |        |         |          |     |
| Sarin (GB), MIL-STD-282 (100 g/m <sup>2</sup> ) | Liquid         | 107-44-8   |        | >480 <sup>8</sup>  |          |    |         |        |         |          |     |
| Silane                                          | Vapor          | 7803-62-5  | >480   | >480               | >480     | 6  | <0.1    | 0.1    | <48     | >480     | 6   |
| 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   |

## 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 |
|----------------------------------------------------------|----------------|-----------|----------|--------------------|--------|----|---------|--------|---------|----------|-----|
| 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 <sup>8</sup> |        |    |         |        |         |          |     |
| Soman (GD), MIL-STD-282 (100 g/m <sup>2</sup> )          | Liquid         | 96-64-0   |          | >480 <sup>8</sup>  |        |    |         |        |         |          |     |
| 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 <sup>8</sup> |        |    |         |        |         |          |     |
| Sulfur Mustard (HD), MIL-STD-282 (100 g/m <sup>2</sup> ) | Liquid         | 505-60-2  |          | >480 <sup>8</sup>  |        |    |         |        |         |          |     |
| 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 <sub>3</sub> )         | Liquid         | 8014-95-7 | >480     | >480               | >480   | 6  | <0.06   | 0.06   | <28.8   | >480     | 6   |
| Sulfuric acid fuming (40% free SO <sub>3</sub> )         | Liquid         | 8014-95-7 | 130*/220 | 455*/468           | >480   | 6  | 0.32    | 0.0001 |         |          |     |
| Sulfuric acid fuming (65% free SO <sub>3</sub> )         | 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 <sup>8</sup> |        |    |         |        |         |          |     |
| Tabun (GA), MIL-STD-282 (100 g/m <sup>2</sup> )          | Liquid         | 77-81-6   |          | >480 <sup>8</sup>  |        |    |         |        |         |          |     |
| 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   |
| 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   |

## 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 |
|-----------------------------------------------------|----------------|------------|----------|--------------------|----------|----|---------|--------|---------|----------|-----|
| 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   |
| 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   |
| Triethylentetramine (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 <sup>8</sup> |          |    |         |        |         |          |     |
| VX Nerve Agent, MIL-STD-282 (100 g/m <sup>2</sup> ) | Liquid         | 50782-69-9 |          | >480 <sup>8</sup>  |          |    |         |        |         |          |     |
| 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/cm<sup>2</sup>/min [mins] |

BT1.0 Normalized breakthrough time at 1.0 µg/cm<sup>2</sup>/min [mins] | EN Classification according to EN 14325 | SSPR Steady state permeation rate [µg/cm<sup>2</sup>/min] |

MDPR Minimum detectable permeation rate [µg/cm<sup>2</sup>/min] | CUM480 Cumulative permeation mass after 480 mins [µg/cm<sup>2</sup>] |

Time150 Time to reach cumulative permeation mass of 150 µg/cm<sup>2</sup> [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 µg/cm<sup>2</sup>/min [mins] acc. ASTM F1383 |

### Important Note

## TECHNICAL DATA SHEET

The permeation data published have been generated for DuPont by independent accredited testing laboratories according to the test method applicable at that time (EN ISO 6529 (method A and B), ASTM F739, ASTM F1383, ASTM D6978, EN369, EN 374-3) The data is typically the average of three fabrics samples tested. All chemicals have been tested at an assay of greater than 95 (w/w) % unless otherwise stated. The tests were performed between 20 °C and 27 °C and at environmental pressure unless otherwise stated. A different temperature may have significant influence on the breakthrough time. Permeation typically increases with temperature. Cumulative permeation data have been measured or have been calculated based on minimum detectable permeation rate. Cytostatic drugs testing has been performed at a test temperature of 27°C according to ASTM D6978 or ISO 6529 with the additional requirement of reporting a normalized breakthrough time at 0.01 µg/cm²/min. Chemical warfare agents (Lewisite, Sarin, Soman, Mustard, Tabun and VX Nerve Agent) have been tested according to MIL-STD-282 at 22°C or according to FINABEL 0.7 at 37°C. Permeation data for Tyvek® is applicable to white Tyvek® 500 and Tyvek® 600 only and is not applicable for other Tyvek® styles or colours. Permeation data are usually measured for single chemicals. The permeation characteristics of mixtures can often deviate considerably from the behaviour of the individual chemicals. The permeation data for gloves published have been generated according to ASTM F739 and to ASTM F1383. The degradation data for gloves published have been generated based on a gravimetric method. This degradation testing exposes one side of the glove material to the test chemical for four hours. The percent weight change after exposure is measured at four time intervals: 5, 30, 60 and 240 minutes.

### Degradation Ratings:

- E: EXCELLENT (0-10% Weight Change)
- G: GOOD (11-20% Weight Change)
- F: FAIR (21-30% Weight Change)
- P: POOR (31-50% Weight Change)
- NR: NOT RECOMMENDED (Above 50% Weight Change)
- NT: NOT TESTED

Degradation is the physical change in a material after chemical exposure. Typical observable effects may be swelling, wrinkling, deterioration, or delamination. Strength loss may also occur.

Please use the permeation data provided as a part of the risk assessment to assist with the selection of a protective fabric, garment, glove or accessory suitable for your application. Breakthrough time is not the same as safe wear time. Breakthrough times are indicative of the barrier performance, but results can vary between the test methods and laboratories. Breakthrough time alone is insufficient to determine how long a garment may be worn once the garment has been contaminated. Safe user wear time may be longer or shorter than the breakthrough time depending on the permeation behaviour of the substance, the toxicity of the substance, working conditions and the exposure conditions (e.g. temperature, pressure, concentration, physical state).

Latest Update Permeation Data: 10/24/2022

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.

### WARNING

The garment does not protect against ionizing radiation.

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.

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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