

Chem-Ply N-740

| Chemical Product | CAS # | BTT (minutes) | Permeation level | Standard | Degradatio level | Rating |
|---|------------|------------------|---------------------|-----------|---------------------|----------------------|
| 1,1,1-Trichloroethane 99% | 71-55-6 | 56 | 2 | ASTM F739 | 1 | - |
| 1,1,1,2-Tetrafluoroethane (HFC-134A) freon 134A 99% | 811-97-2 | 480 | 6 | ASTM F739 | NT | NA |
| 1,1,2-Trichlorotrifluoroethane (Freon TF or Freon 113) 99% | 76-13-1 | 480 | 6 | ASTM F739 | 4 | ++ |
| 1,1,2,2-Tetrachloroethane 98% | 79-34-5 | 52 | 2 | ASTM F739 | 1 | - |
| 1,2 - dichloroethane 99% | 107-06-2 | 23 | 1 | ASTM F739 | 1 | - |
| 1,2-Dichlorobenzene 99% | 95-50-1 | 49 | 2 | ASTM F739 | 1 | - |
| 1,2,4-Trichlorobenzene 99% | 120-82-1 | 142 | 4 | ASTM F739 | 2 | + |
| 1,3 - Dichlorobenzene 98% | 541-73-1 | 42 | 2 | ASTM F739 | 1 | - |
| 2-Butoxyethanol (Butyl Cellusolve) 99% | 111-76-2 | 480 | 6 | ASTM F739 | 4 | ++ |
| 2-Chlorotoluene (o-Chlorotoluene) 99% | 95-49-8 | 36 | 2 | ASTM F739 | 1 | - |
| 2-Ethoxyethanol (Cellosolve) 99% | 110-80-5 | 480 | 6 | ASTM F739 | 4 | ++ |
| 2-Ethoxyethyl acetate (Cellosolve Acetate) 99% | 111-15-9 | 127 | 4 | ASTM F739 | 4 | ++ |
| 2-Methylpentamethylenediamine 99% | 15520-10-2 | 341 | 5 | ASTM F739 | NT | NA |
| 2-Propanol (Isopropanol) 99% | 67-63-0 | 480 | 6 | ASTM F739 | 4 | ++ |
| 2,2,2-Trifluoroethanol 99% | 75-89-8 | 480 | 6 | ASTM F739 | 4 | ++ |
| 4-Chlorotoluene (p-Chlorotoluene) 98% | 106-43-4 | 24 | 1 | ASTM F739 | 1 | - |
| Acetaldehyde 99% | 75-07-0 | 39 | 2 | ASTM F739 | 4 | + |
| Acetic acid 10% | 64-19-7 | 480 | 6 | ASTM F739 | 4 | ++ |
| Acetic acid 50% | 64-19-7 | 480 | 6 | ASTM F739 | 4 | ++ |
| Acetic acid 99% | 64-19-7 | 480 | 6 | ASTM F739 | 4 | ++ |
| Acetone 99% | 67-64-1 | 36 | 2 | ASTM F739 | 4 | + |
| Acetonitrile 99% | 75-05-8 | 143 | 4 | ASTM F739 | 4 | ++ |
| Acrylonitrile 99% | 107-13-1 | 109 | 3 | ASTM F739 | 4 | ++ |
| Ammonium hydroxide solution 29% | 1336-21-6 | 480 | 6 | ASTM F739 | 4 | ++ |
| Aniline 99% | 62-53-3 | 415 | 5 | ASTM F739 | 4 | ++ |
| | | | | | *n | ot normalized result |

Overall Chemical Protection Rating

Protection rating is determined by taking into account the effects of both permeation and degradation in an attempt to provide users with an overall protection guideline when using our glove products against specific chemicals.

Used for **high chemical exposure** or chemical immersion, limited to BTT based on a working day.

Used for repeated chemical contact, limited to total chemical exposure i.e. : accumulative BTT based on a working day.
Splash protection only, on chemical exposure the gloves should be discarded and new gloves worn as soon as possible.

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| Benzene 99% | 71-43-2 | 21 | 1 | ASTM F739 | 1 | - |
| Butyl Acetate 99% | 123-86-4 | 45 | 2 | ASTM F739 | 3 | + |
| Carbon disulfide 99% | 75-15-0 | 8 | 0 | ASTM F739 | 1 | - |
| Carbon Tetrachloride 99% | 56-23-5 | 56 | 2 | ASTM F739 | 1 | - |
| Chlorobenzene 99% | 108-90-7 | 28 | 1 | ASTM F739 | 1 | - |
| Chloroform 99% | 67-66-3 | 13 | 1 | ASTM F739 | 1 | - |
| Chromic Acid 50% | 7738-94-5 | 480 | 6 | ASTM F739 | 4 | ++ |
| Cumene 98% | 98-82-8 | 66 | 3 | ASTM F739 | 3 | ++ |
| Cyclohexane 99% | 110-82-7 | 184 | 4 | ASTM F739 | 4 | ++ |
| Dichloromethane (Methylene Chloride) 99% | 75-09-2 | 12 | 1 | ASTM F739 | 1 | - |
| Diethanolamine 97% | 111-42-2 | 480 | 6 | ASTM F739 | 4 | ++ |
| Dimethylformamide 99% | 68-12-2 | 217 | 4 | ASTM F739 | 4 | ++ |
| Dimethylsulfoxide 99% | 67-68-5 | 480 | 6 | ASTM F739 | 4 | ++ |
| Ethanol 95% | 64-17-5 | 480 | 6 | ASTM F739 | 4 | ++ |
| Ether (Diethyl Ether) 99% | 60-29-7 | 28 | 1 | ASTM F739 | 3 | = |
| Ethyl acetate 99% | 141-78-6 | 37 | 2 | ASTM F739 | 3 | + |
| Ethylene glycol 99% | 107-21-1 | 480 | 6 | ASTM F739 | 4 | ++ |
| Ethylene oxide 99% | 75-21-8 | 45 | 2 | ASTM F739 | NT | NA |
| Formaldehyde 37% | 50-00-0 | 480 | 6 | ASTM F739 | 4 | ++ |
| Freon 12 99% | 75-71-8 | 480 | 6 | ASTM F739 | NT | NA |
| Furfural 99% | 98-01-1 | 258 | 5 | ASTM F739 | 4 | ++ |
| Hydrazine 35% | 302-01-2 | 480 | 6 | ASTM F739 | 4 | ++ |
| Hydrazine 70% | 302-01-2 | 480 | 6 | ASTM F739 | 4 | ++ |
| Hydrazine 98% | 302-01-2 | NT | NT | | 4 | NA |
| Hydrochloric acid 10% | 7647-01-0 | 480 | 6 | ASTM F739 | 4 | ++ |
| Hydrochloric acid 35% | 7647-01-0 | 480 | 6 | EN 374-3:2003 | 4 | ++ |

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| Hydrochloric acid 37% | 7647-01-0 | 480 | 6 | ASTM F739 | 4 | ++ |
| Hydrofluoric Acid 10% | 7664-39-3 | 480 | 6 | ASTM F739 | 4 | ++ |
| Hydrofluoric Acid 49% | 7664-39-3 | 480 | 6 | ASTM F739 | 4 | ++ |
| Hydrogen fluoride Anhydrous 100% | 7664-39-3 | 240 | 4 | EN 374-3:1994 | NT | NA |
| Hydrogen fluoride Anhydrous 99% | 7664-39-3 | 480 | 6 | ASTM F739 | NT | NA |
| lodomethane (Methyl lodide) 99% | 74-88-4 | 9 | 0 | ASTM F739 | NT | NA |
| Isoamyl Acetate (Isopentylacetate) 98% | 123-92-2 | 122 | 4 | ASTM F739 | 3 | ++ |
| Isobutyl alcohol 99% | 78-83-1 | 480 | 6 | ASTM F739 | 4 | ++ |
| Kerosene mixture | 8008-20-6 | 480 | 6 | ASTM F739 | 4 | ++ |
| m-Cresol 97% | 108-39-4 | 480 | 6 | ASTM F739 | 4 | ++ |
| Methanol 85% | 67-56-1 | NT | NT | | 4 | NA |
| Methanol 99% | 67-56-1 | 245 | 5 | ASTM F739 | 4 | ++ |
| Methyl Amyl Ketone 98% | 110-43-0 | 52 | 2 | ASTM F739 | 3 | + |
| Methyl Ethyl Ketone (2-Butanone) 99% | 78-93-3 | 25 | 1 | ASTM F739 | 3 | = |
| Methylisobutylketone 99% | 108-10-1 | 63 | 3 | ASTM F739 | 3 | ++ |
| Mineral Spirits 100% | 64475-85-0 | NT | NT | | 4 | NA |
| n-Heptane 99% | 142-82-5 | 186 | 4 | ASTM F739 | 4 | ++ |
| n-hexane 95% | 110-54-3 | 132 | 4 | ASTM F739 | 4 | ++ |
| N-methyl-2-Pyrrolidone 99% | 872-50-4 | 226 | 4 | ASTM F739 | 3 | ++ |
| N-N dimethyl acetamide 30% | 127-19-5 | NT | NT | | 4 | NA |
| N-N dimethyl acetamide 99% | 127-19-5 | 92 | 3 | ASTM F739 | 4 | ++ |
| Naphtha mixture | 8030-30-6 | NT | NT | | 4 | NA |
| Naphtha Heavy mixture | 68551-17-7 | 480 | 6 | ASTM F739 | NT | NA |
| Naphtha VM&P mixture | 8032-32-4 | 89 | 3 | ASTM F739 | 4 | ++ |
| Naphtha, Hydrodesulphurized Heavy mixture | 64742-82-1 | 392 | 5 | EN 374-3:2003 | 2 | + |
| Naphtha, Hydrotreated Heavy mixture | 64742-48-9 | 370 | 5 | EN 374-3:2003 | NT | NA |

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| Nitric acid 10% | 7697-37-2 | 480 | 6 | ASTM F739 | 4 | ++ |
| Nitric acid 20% | 7697-37-2 | 480 | 6 | ASTM F739 | 4 | ++ |
| Nitric acid 40% | 7697-37-2 | 480 | 6 | ASTM F739 | 4 | ++ |
| Nitric acid 50% | 7697-37-2 | 480 | 6 | ASTM F739 | 4 | ++ |
| Nitric acid 68% | 7697-37-2 | 480 | 6 | EN 374-3:2003 | 3 | ++ |
| Nitric acid 90% | 7697-37-2 | 9 | 0 | ASTM F739 | NT | NA |
| Nitrobenzene 99% | 98-95-3 | 132 | 4 | ASTM F739 | 3 | ++ |
| Oleic Acid 90% | 112-80-1 | NT | NT | | 4 | NA |
| p-dioxane (1,4-Dioxane) 99% | 123-91-1 | 74 | 3 | ASTM F739 | NT | NA |
| Pentane 99% | 109-66-0 | 122 | 4 | ASTM F739 | 4 | ++ |
| Pentane isomers mixture | NA | 161 | 4 | EN 374-3:2003 | NT | NA |
| Phenol 85% | 108-95-2 | 480 | 6 | ASTM F739 | 4 | ++ |
| Phosphoric acid 75% | 7664-38-2 | 480 | 6 | ASTM F739 | 4 | ++ |
| Phosphoric acid 85% | 7664-38-2 | 480 | 6 | ASTM F739 | 4 | ++ |
| Polychlorinated Biphenyl (PCB) (50%) in 1,2,4-Trichlorobenzene mixture | 11097-69-1 | 161 | 4 | ASTM F739 | NT | NA |
| Potassium Hydroxide 50% | 1310-58-3 | 480 | 6 | ASTM F739 | 4 | ++ |
| Pyridine 99% | 110-86-1 | 36 | 2 | ASTM F739 | 2 | = |
| Sodium hydroxide 20% | 1310-73-2 | 480 | 6 | ASTM F739 | 4 | ++ |
| Sodium hydroxide 40% | 1310-73-2 | 480 | 6 | ASTM F739 | 4 | ++ |
| Sodium hydroxide 50% | 1310-73-2 | 480 | 6 | ASTM F739 | 4 | ++ |
| Styrene 99% | 100-42-5 | 20 | 1 | EN 374-3:2003 | 1 | - |
| Sulfuric acid 10% | 7664-93-9 | 480 | 6 | ASTM F739 | 4 | ++ |
| Sulfuric acid 40% | 7664-93-9 | 480 | 6 | ASTM F739 | 4 | ++ |
| Sulfuric acid 50% | 7664-93-9 | 480 | 6 | ASTM F739 | 4 | ++ |
| Sulfuric acid 96% | 7664-93-9 | 480 | 6 | ASTM F739 | 3 | ++ |
| Tetrachloroethylene (Perchloroethylene) 99% | 127-18-4 | 40 | 2 | ASTM F739 | 1 *nc | - |

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| Tetrahydrofurane 99% | 109-99-9 | NT | NT | | 1 | NA |
| Toluene 99% | 108-88-3 | 19 | 1 | ASTM F739 | 1 | - |
| Toluene Diisocyanate (TDI) 80% | 584-84-9 | 480 | 6 | ASTM F739 | 4 | ++ |
| Trichloroethylene 99% | 79-01-6 | 12 | 1 | ASTM F739 | 1 | - |
| Triethanolamine 98% | 102-71-6 | 480 | 6 | ASTM F739 | 4 | ++ |
| Triethylamine 99% | 121-44-8 | 133 | 4 | ASTM F739 | NT | NA |
| Turpentine mixture | 8006-64-2 | 480 | 6 | ASTM F739 | 4 | ++ |
| Unleaded gasoline mixture | 8006-61-9 | 41 | 2 | ASTM F739 | 2 | = |
| Vinyl acetate 99% | 108-05-4 | 38 | 2 | ASTM F739 | 4 | + |
| Xylene 99% | 1330-20-7 | 24 | 1 | ASTM F739 | 1 | - |

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