



Trionic O-240

| Chemical Product | CAS # | Breakthrough time (minutes) | Permeation level | Standard | Degradation level | Rating |
|--|-------------|-----------------------------|------------------|-----------|-------------------|--------|
| 1,1,1-Trichloroethane 99% | 71-55-6 | 7 | 0 | ASTM F739 | NT | --- |
| 1,1,1,2,2,3,4,5,5,5-Decafluoropentane 97% | 138495-42-8 | 13 | 1 | ASTM F739 | NT | --- |
| 1,1,2-Trichlorotrifluoroethane (Freon TF or Freon 113) 99% | 76-13-1 | 20 | 1 | ASTM F739 | 1 | - |
| 1,2 Dichloroethylene 98% | 156-60-5 | 2 | 0 | ASTM F739 | 2 | - |
| 1,3 Ethoxy propionate (Ethyl 3-ethoxypropionate) 99% | 763-69-9 | 480 | 6 | ASTM F739 | NT | --- |
| 2-Butoxyethanol (Butyl Cellusolve) 99% | 111-76-2 | 53 | 2 | ASTM F739 | NT | --- |
| 2-Butoxyethylacetate (Butyl cellosolve acetate) 85% | 112-07-2 | 35 | 2 | ASTM F739 | NT | --- |
| 2-Ethoxyethanol (Cellosolve) 99% | 110-80-5 | 27 | 1 | ASTM F739 | NT | --- |
| 2-Ethoxyethyl acetate (Cellosolve Acetate) 99% | 111-15-9 | 14 | 1 | ASTM F739 | 4 | + |
| 2-Methoxyethanol (Methyl Cellosolve) 99% | 109-86-4 | 40 | 2 | ASTM F739 | NT | --- |
| 2-Methoxyethanol Acetate (Methyl cellosolve acetate) 98% | 110-49-6 | 27 | 1 | ASTM F739 | NT | --- |
| 2-Propanol (Isopropanol) 99% | 67-63-0 | 38 | 2 | ASTM F739 | 4 | + |
| 4,4 - diamino diphenylsulfone 97% | 80-008-0 | 480 | 6 | ASTM F739 | NT | --- |
| 4,4'-Methylenedianiline (MDA) 15% and 15% Methanol mixture | 101-77-9 | 19 | 1 | ASTM F739 | NT | --- |
| 4,4'-Methylenedianiline (MDA) 15% in Toluene mixture | 101-77-9 | 15 | 1 | ASTM F739 | NT | --- |
| Acetic acid 10% | 64-19-7 | NT | NT | | 4 | --- |
| Acetic acid 50% | 64-19-7 | NT | NT | | 4 | --- |
| Acetic acid 99% | 64-19-7 | 32 | 2 | ASTM F739 | 4 | + |
| Acetone 99% | 67-64-1 | 6 | 0 | ASTM F739 | 4 | = |
| Aluminum Etch mixture | NA | 960 | 6 | ASTM F739 | 4 | ++ |
| Aluminum Oxide mixture | NA | 55 | 2 | ASTM F739 | NT | --- |
| Ammonium Fluoride 40% | 12125-01-8 | 480 | 6 | ASTM F739 | NT | --- |
| Ammonium Fluoride 79% | 12125-01-8 | 480 | 6 | ASTM F739 | NT | --- |
| Ammonium hydroxide solution 29% | 1336-21-6 | 36 | 2 | ASTM F739 | 4 | + |
| Baker PRS-1000 mixture | NA | 20 | 1 | ASTM F739 | NT | --- |
| Baker PRS-2000 mixture | NA | 130 | 4 | ASTM F739 | NT | --- |
| Baker PRS-3000 mixture | NA | 480 | 6 | ASTM F739 | NT | --- |

*not normalized result

Overall Chemical Protection Rating

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| Benzene 99% | 71-43-2 | 4 | 0 | ASTM F739 | 1 | - |
| Buffered Oxide Etch mixture | NA | 480 | 6 | ASTM F739 | 4 | ++ |
| Butyl Acetate 99% | 123-86-4 | 7 | 0 | ASTM F739 | 4 | = |
| Chromic Acid 50% | 7738-94-5 | 60 | 2 | ASTM F739 | NT | |
| Cyclohexanone 99% | 108-94-1 | 23 | 1 | ASTM F739 | 1 | - |
| Cyclopentanone 99% | 120-92-3 | 11 | 1 | ASTM F739 | NT | |
| Dichloromethane (Methylene Chloride) 99% | 75-09-2 | 4 | 0 | ASTM F739 | NT | |
| Dichromate cleaning solution mixture | NA | 480 | 6 | ASTM F739 | 4 | ++ |
| Diethylamine 98% | 109-89-7 | 4 | 0 | ASTM F739 | NT | |
| Diglycidal ether of bisphenol 100% | 25068-38-6 | 480 | 6 | ASTM F739 | NT | |
| Dimethylamine 35% | 124-40-3 | 53 | 2 | ASTM F739 | NT | |
| Dimethylformamide 99% | 68-12-2 | 8 | 0 | ASTM F739 | NT | |
| Dimethylsulfoxide 99% | 67-68-5 | 181 | 4 | ASTM F739 | 4 | ++ |
| Epichlorohydrin 99% | 106-89-8 | 4 | 0 | ASTM F739 | NT | |
| Ethanol 95% | 64-17-5 | 21 | 1 | ASTM F739 | NT | |
| Ethyl lactate 95% | 97-64-3 | 29 | 1 | ASTM F739 | NT | |
| Ethylene glycol 99% | 107-21-1 | 480 | 6 | ASTM F739 | 4 | ++ |
| Hexamethyldisilazane (HMDS) 98% | 999-97-3 | 18 | 1 | ASTM F739 | 1 | - |
| Hydrochloric acid 10% | 7647-01-0 | 480 | 6 | EN 374-3:2003 | 4 | ++ |
| Hydrochloric acid 35% | 7647-01-0 | NT | NT | | 4 | |
| Hydrochloric acid 37% | 7647-01-0 | 454 | 5 | ASTM F739 | 4 | ++ |
| Hydrofluoric Acid 10% | 7664-39-3 | NT | NT | | 4 | |
| Hydrofluoric Acid 49% | 7664-39-3 | 390 | 5 | ASTM F739 | NT | |
| Hydrogen peroxide 30% | 7722-84-1 | 960 | 6 | ASTM F739 | 4 | ++ |
| Hydrotreated Light Naphthenic Distillate mixture | 64742-53-6 | 161 | 4 | ASTM F739 | 2 | + |
| Kerosene mixture | 8008-20-6 | 26 | 1 | ASTM F739 | 1 | - |
| KOH Etch mixture | NA | 278 | 5 | ASTM F739 | 4 | ++ |
| KTI Pad Etch mixture | NA | 480 | 6 | ASTM F739 | NT | |
| KTI Silicon Etch mixture | NA | 480 | 6 | ASTM F739 | NT | |

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| Methanesulfonic Acid 99% | 75-75-2 | NT | NT | | 4 | --- |
| Methanol 85% | 67-56-1 | NT | NT | | 4 | --- |
| Methanol 99% | 67-56-1 | 19 | 1 | ASTM F739 | 4 | + |
| Methyl Amyl Ketone 98% | 110-43-0 | 8 | 0 | ASTM F739 | 1 | - |
| Methyl Ethyl Ketone (2-Butanone) 99% | 78-93-3 | 4 | 0 | ASTM F739 | 3 | = |
| Methyl-3-methoxypropionate 100% | 3852-09-3 | 11 | 1 | ASTM F739 | 3 | = |
| n-hexane 95% | 110-54-3 | 3 | 0 | ASTM F739 | 1 | - |
| N-methyl-2-Pyrrolidone 99% | 872-50-4 | 50 | 2 | ASTM F739 | 4 | + |
| N-N dimethyl acetamide 99% | 127-19-5 | 47 | 2 | ASTM F739 | NT | --- |
| Naphtha VM&P mixture | 8032-32-4 | 2 | 0 | ASTM F739 | 1 | - |
| Nitric acid 10% | 7697-37-2 | 840 | 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 | NT | NT | | 4 | --- |
| Nitric acid 68% | 7697-37-2 | 299 | 5 | EN 374-3:2003 | 4 | ++ |
| Nitric acid 70% | 7697-37-2 | 307 | 5 | ASTM F739 | 4 | ++ |
| Nitric acid 90% | 7697-37-2 | 7 | 0 | ASTM F739 | NT | --- |
| Nitride Etch mixture | NA | NT | NT | | 4 | --- |
| Nitrohydrochloric acid (Aqua Regia) mixture | 8007-56-5 | 480 | 6 | ASTM F739 | NT | --- |
| Phenol 85% | 108-95-2 | 102 | 3 | 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 | ++ |
| Phosphorus Oxychloride 99% | 10025-87-3 | 15 | 1 | ASTM F739 | NT | --- |
| Piranha Etch mixture | NA | 243 | 5 | ASTM F739 | 1 | - |
| Polyethylene glycol octylphenyl ether 100% | 9002-93-1 | 480 | 6 | ASTM F739 | NT | --- |
| Potassium Hydroxide 50% | 1310-58-3 | 480 | 6 | ASTM F739 | 4 | ++ |
| Potassium Hydroxide Etch mixture | NA | 24 | 1 | ASTM F739 | NT | --- |

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| Propylene Glycol 99% | 57-55-6 | 480 | 6 | ASTM F739 | 4 | ++ |
| Propylene Glycol Methyl Ethyl Acetate (PGMEA) 99% | 108-65-6 | 47 | 2 | ASTM F739 | 3 | + |
| Propylene Glycol Monomethyl Ether 99% | 107-98-2 | 26 | 1 | ASTM F739 | 4 | + |
| Silicon Tetrachloride 100% | 10026-04-7 | 15 | 1 | ASTM F739 | NT | |
| Slope Etch mixture | NA | 260 | 5 | ASTM F739 | 4 | ++ |
| Sodium hydroxide 20% | 1310-73-2 | 780 | 6 | ASTM F739 | 4 | ++ |
| Sodium hydroxide 40% | 1310-73-2 | 780 | 6 | ASTM F739 | 4 | ++ |
| Sodium hydroxide 50% | 1310-73-2 | 780 | 6 | ASTM F739 | 4 | ++ |
| Sulfuric acid 10% | 7664-93-9 | 900 | 6 | ASTM F739 | 4 | ++ |
| Sulfuric acid 96% | 7664-93-9 | 102 | 3 | ASTM F739 | 1 | - |
| Tetrachloroethylene (Perchloroethylene) 99% | 127-18-4 | 4 | 0 | ASTM F739 | 1 | - |
| Tetraethyl Orthosilicate 100% | 78-10-4 | 25 | 1 | ASTM F739 | 1 | - |
| Tetramethyl Ammonium Hydroxide 25% | 75-59-2 | 480 | 6 | ASTM F739 | 4 | ++ |
| Thionylchloride 99% | 7719-09-7 | 15 | 1 | ASTM F739 | NT | |
| Toluene 49% Methyl Isobutyl Ketone 34.5% Methyl Ethyl Ketone 16.5% mixture | NA | 1 | 0 | EN 374-3:2003 | NT | |
| Toluene Diisocyanate (TDI) 80% | 584-84-9 | 27 | 1 | ASTM F739 | NT | |
| Trichloroethylene 99% | 79-01-6 | NT | NT | | 1 | |
| Trimethylphosphite 97% | 121-45-9 | 10 | 0 | ASTM F739 | NT | |
| Unleaded gasoline mixture | 8006-61-9 | 4 | 0 | ASTM F739 | 1 | - |
| Xylene 99% | 1330-20-7 | 4 | 0 | ASTM F739 | 1 | - |

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