

MrPEX Tubing – Chemical Resistance

The table below provides a good indication on our PEX tubing's compatibility with various chemicals. The list is based upon a combination of literature studies, testing, and experiences and is provided for guidance only, and without any warranty.

Our PEX Tubing is pressure rated (and warranted) for water. The rating is 160 psi @ 73°F; 100 psi @ 180°F; and 80 psi @ 200°F. The Tubing is not rated at 140°F (one of the temperatures we provide resistance for), but the rating at that temperature would be approximately 130 psi. The Table enclosed provides maximum recommended inside pressure as a percentage of these pressure ratings. Note that we do not recommend using PEX Tubing with Chemicals at temperatures over 180°F. Although PEX Tubing is considered fully resistant to many chemicals, we recommend a reduction of the maximum pressure applied at 180°F to 80%. Refer to the table for other suggested minimum pressure reductions. Where a percentage of 0% appears, this means that the material is OK for pressureless applications at actual temperature. When concentration is provided as "technical grade" or "commercial grade," this refers to the concentration that the chemical is typically available in, in the actual industry.

NOTE: PEX Tubing is not resistant to UV light, so extended exposure (more than a few weeks) to direct sunlight must be avoided.

NOTE: The Table only indicates the resistance to the actual Chemical. It does not provide information about the possible diffusion of the chemical into the material, or through the material.

Chemical	Concentration	73°F	140°F	180°F
Acetaldehyde 40%	< 40%	100%	90%	50%
Acetamide	Any	100%	100%	80%
Acetic Acid	< 60%	100%	100%	80%
Acetic Anhydride	Technical Grade	100%	50%	0%
Acetone	Technical Grade	100%	50%	0%
Acetylene	Any	100%	100%	80%
Acryl Nitrile	Any	100%	100%	80%
Allyl Alcohol	Technical Grade	100%	100%	80%
Aluminum Salts Solutions	Saturated	100%	100%	80%
Ammonia (Gas & Liquid)	Technical Grade	100%	100%	80%
Ammonium Salt Solutions	Saturated	100%	100%	80%
Amyl Acetate	Technical Grade	100%	50%	0%
Amyl Alcohol	Technical Grade	100%	50%	0%
Aniline	Technical Grade	100%	50%	0%
Aqua Regalis (Acid Mix)	Any	Do Not Use	Do Not Use	Do Not Use
Ascorbic Acid	Technical Grade	100%	100%	80%
Barium Salts Solutions	Saturated	100%	100%	80%
Beer	Commercial Grade	100%	100%	80%
Benzene	Technical Grade	100%	30%	0%
Benzoic Acid	Saturated	100%	100%	80%
Boric Acid	Technical Grade	100%	100%	80%
Bromine	Any	Do Not Use	Do Not Use	Do Not Use
Butadiene	< 40%	100%	100%	80%
Butanol	Technical Grade	100%	100%	80%
Butter	Any	100%	100%	80%

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Chemical	Concentration	73°F	140°F	180°F
Butyl Acetate	Concentrated	100%	90%	50%
Butyric Acid	Concentrated	100%	90%	50%
Calcium Salts Solution	Saturated	100%	100%	80%
Calcium Chloride	Saturated	100%	100%	80%
Calcium Hypochlorite	Technical Grade	50%	10%	0%
Calcium Nitrate	Saturated	100%	100%	80%
Carbon Dioxide	Any	100%	100%	80%
Carbon Disulphide	Technical Grade	50%	Do Not Use	Do Not Use
Carbon Tetrachloride	Technical Grade	50%	Do Not Use	Do Not Use
Chlorinated Water	< 3%	100%	100%	80%
Chlorine	Concentrated	Do Not Use	Do Not Use	Do Not Use
Chlorobenzene	Technical Grade	100%	90%	50%
Chloroform	Technical Grade	50%	Do Not Use	Do Not Use
Chromic Acid	Saturated	100%	90%	50%
Chromium Salts Solutions	Saturated	100%	100%	80%
Citric Acid	Saturated	100%	100%	80%
Coconut Oil	Concentrated	100%	100%	80%
Coffee	Commercial Grade	100%	100%	100%
Copper Salts Solutions	Saturated	100%	100%	80%
Corn Oil	Saturated	100%	100%	80%
Cotton Seed Oil	Saturated	100%	100%	80%
Cyclohexane	Any	Do Not Use	Do Not Use	Do Not Use
Cyclohexanol	Saturated	100%	100%	80%
Cyclohexanone	Technical Grade	100%	90%	50%
Deca Hydro Naphthalene	Technical Grade	50%	Do Not Use	Do Not Use
Detergents	Any	100%	100%	80%
Dibutyl Ether	Technical Grade	100%	100%	80%
Dibutyl Phthate	Technical Grade	100%	90%	50%
Dichloroethylene	Any	Do Not Use	Do Not Use	Do Not Use
Diesel Oil	Concentrated	50%	10%	0%
Diglycol Acid	Technical Grade	100%	100%	80%
Dimethyl Amine	Technical Grade	Do Not Use	Do Not Use	Do Not Use
Dimethyl Formamide	Technical Grade	100%	90%	50%
Dioxane	Technical Grade	100%	100%	80%
Ethanol (Ethyl Alcohol)	Technical Grade	100%	100%	80%
Ethyl Acetate	Technical Grade	100%	50%	0%
Ethyl Ether	Technical Grade	50%	10%	0%
Ethylene Chloride	Concentrated	Do Not Use	Do Not Use	Do Not Use
Ethylene Diamine	Concentrated	100%	100%	80%
Ethylene Glycol 100%	Technical Grade	100%	100%	80%
Fatty Acid	Technical Grade	100%	50%	0%
Fluorides	Technical Grade	100%	100%	80%

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Chemical	Concentration	73°F	140°F	180°F
Flourine	Any	Do Not Use	Do Not Use	Do Not Use
Formaldehyde	< 40%	100%	100%	80%
Freon F12	Technical Grade	50%	10%	0%
Glycerine	Technical Grade	100%	100%	80%
Glycol	< 40%	100%	100%	80%
Hydrochloric Acid	Concentrated	100%	100%	80%
Hydrofluoric Acid	< 40%	100%	100%	80%
Hydrogen Peroxide	< 90%	100%	100%	80 %
Hydrogen Sulphide	Technical Grade	100%	100%	80%
Ink	Any	100%	100%	80%
Iodine (in solution)	Any	Do Not Use	Do Not Use	Do Not Use
Iron Salts Solution	Saturated	100%	100%	80%
Lactic Acid	Technical Grade	100%	100%	80%
Lead Acetate	Saturated	100%	100%	80%
Maleic Acid	Saturated	100%	100%	80%
Mercury	Technical Grade	100%	100%	80%
Mercury Salts Solution	Saturated	100%	100%	80%
Methanol (Methyl Alcohol)	Technical Grade	100%	100%	80%
Methyl Chloride	Any	Do Not Use	Do Not Use	Do Not Use
Methyl Ethyl Ketone	Technical Grade	100%	100%	80%
Milk	Commercial Grade	100%	100%	100%
Mineral Oil	Technical Grade	100%	100%	80%
Motor Oil	Technical Grade	100%	50%	0%
Naphta	Technical Grade	100%	100%	80%
Nitric Acid	< 30%	100%	50%	0%
Nitric Acid	> 30%	Do Not Use	Do Not Use	Do Not Use
Nitrogen	Any	100%	100%	100%
Nitrobenzene	Concentrated	Do Not Use	Do Not Use	Do Not Use
Oil	Technical Grade	100%	50%	0%
Oleum	Technical Grade	Do Not Use	Do Not Use	Do Not Use
Olive Oil	Technical Grade	100%	50%	0%
Oxalic Acid	Saturated	100%	100%	80%
Ozone	Technical Grade	50%	10%	Do Not Use
Paraffine Oil	Commercial Grade	100%	100%	80%
Perchloric Acid	< 20%	100%	100%	80%
Perchloric Acid	< 70%	100%	50%	0%
Phenol	< 70%	100%	90%	50%
Phosphoric Acid	< 70%	100%	100%	80%
Phthalic Acid	< 50%	100%	100%	80%
Potassium Salts Solution	Saturated	100%	100%	80%
Propionic Acid	Technical Grade	100%	50%	0%
Pyridine	Technical Grade	100%	50%	0%

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Chemical	Concentration	73°F	140°F	180°F
Silicone Oils	Any	100%	100%	80%
Silver Nitrate	< 70%	100%	100%	80%
Silver Salts Solution	Saturated	100%	100%	80%
Sodium Salts Solution	Saturated	100%	100%	80%
Sodium Hydroxide	Saturated	100%	100%	80%
Sodium Hypochlorite	< 15%	50%	10%	Do Not Use
Stearic Acid	Saturated	100%	50%	0%
Sulphuric Acid	< 70%	100%	100%	80%
Sulphuric Acid	> 70%	50%	10%	Do Not Use
Tallow	Concentrated	100%	90%	50%
Tannic Acid	Technical Grade	100%	100%	80%
Tartaric Acid	Saturated	100%	100%	80%
Tetrachloro Methane	Concentrated	50%	10%	Do Not Use
Tetrahydro Furane	Technical Grade	50%	10%	Do Not Use
Tin Salts Solution	Saturated	100%	100%	80%
Toluene	Technical Grade	50%	10%	Do Not Use
Trichloro Ethylene	Technical Grade	50%	10%	Do Not Use
Turpentine	Commercial Grade	Do Not Use	Do Not Use	Do Not Use
Urea	Technical Grade	100%	100%	80%
Vaseline	Commercial Grade	100%	100%	80%
Wine (and Vinegar)	Commercial Grade	100%	100%	80%
Xylol	Technical Grade	50%	10%	Do Not Use
Zinc Salts Solution	Saturated	100%	100%	80%