HIGH DENSITY POLYETHYLENE (HDPE)
CHEMICAL RESISTANCE

Legend: S = Satisfactory O = Some Attack U = Unsatisfactory

	70*F	140*F
Acetaldehyde	S	O
Acetic acid 1-10%	S	S
Acetic acid 10-60%	S	O
Acetic acid 80-100%	S	O
Acetic anhydride	S	S
Acetone	S	S
Acids, aromatic	S	S
Acrylic emulsions	S	S
Adipic acid	S	S
Aluminum chloride dilute	S	S
Aluminum chloride Conc.	S	S
Aluminum fluoride Conc.	S	S
Aluminum sulfate Conc.	S	S
Alums (all types) Conc.	S	S
Amino acetic acid	S	S
Ammonia 100% dry gas	S	S
Ammonium acetate	S	S
Ammonium bromide	S	S
Ammonium carbonate	S	S
Ammonium chloride Sat'd	S	S
Ammonium fluoride 20%	S	S
Ammonium hydroxide	S	S
Ammonium nitrate sat'd	S	S
Ammonium persulfate sat'd	S	S
Ammonium sulfate sat'd	S	S
Ammonium sulfide sat'd	S	S
Ammonium thiocyanate	S	S
Amyl acetate 100%	O	U
Amyl alcohol 100%	S	S
Amyl chloride 100%	O	U
Aniline 100%	S	U
Anise seed oil	O	U
Antimony chloride	S	S
Aqua regia	O	U
Aromatic hydrocarbons	U	U
Arsenic	S	S
Aspirin	S	S
Barium carbonate sat'd	S	S
Barium chloride sat'd	S	S
Barium sulfate sat'd	S	S
Barium sulfide sat'd	S	S
Benzene sulfonic acid	S	S
Bixmuth carbonate sat'd	S	S
Black liquor	S	S
Borax cold sat'd	S	S
Boric acid dilute	S	S
Bromic acid 10%	S	S
Bromine liquid 100%	O	U
Butanediol 10%	S	S
Butanediol 60%	S	S
Butanediol 100%	S	S

	70*F	140*F
Butter	S	S
Butyl acetate 100%	O	U
Butyl alcohol 100%	S	S
Butyl glycol	S	S
Butyric acid 100%	S	S
Calcium Bisulfide	S	S
Calcium carbonate sat'd	S	S
Calcium chlorate sat'd	S	S
Calcium hypochlorite bleach	S	S
Calcium nitrate 50%	S	S
Calcium sulfate	S	S
Carbon dioxide 100% dry	S	S
Carbon dioxide 100% wet	S	S
Carbon dioxide cold sat'd	S	S
Carbon monoxide	S	S
Chlorine liquid	O	U
Chlorosulfonic Acid 100%	U	U
Chromic Acid 50%	S	O
Cider	S	S
Coconut oil alcohols	S	S
Copper chloride sat'd	S	S
Copper cyanide sat'd	S	S
Copper fluoride 2%	S	S
Copper Nitrate sat'd	S	S
Copper sulfate dilute	S	S
Copper sulfate sat'd	S	S
Cuprous chloride sat'd	S	S
Cyclohexanone	U	U
Dextrin sat'd	S	S
Dextrose sat'd	S	S
Disodium phosphate	S	S
Diethylene glycol	S	S
Emulsions photographic	S	S
Ether	O	O
Ethyl acetate 100%	O	O
Ethyl alcohol 100%	S	S
Ethyl chloride	O	U
Ethylene glycol	S	S
Ferric chloride sat'd	S	S
Ferric nitrate sat'd	S	S
Ferrous chloride sat'd	S	S
Ferrous sulfate	S	S
Fluoboric acid	S	S
Fluorine	S	U
Fluosilicic acid 32%	S	S
Fluosilicic acid con't	S	S
Formic acid 20%-100%	S	S
Fructose sat'd	S	S

	70*F	140*F
Fuel Oil	S	U
Galic acid sat'd	S	S
Gasolene	S	U
Glycol	S	S
Glycolic acid 30%	S	S
Grape juice	S	S
Grapefruit juice	S	S
Heptane	O	U
Hydrobrobromic acid 50%	S	S
Hydrocyanic acid sat'd	S	S
Hydrochloric acid 30%	S	S
Hydorfluoric acid 40-60%	S	S
Hydrogen 100%	S	S
Hydrogen bromide 10%	S	S
Hydrogen chloride gas dry	S	S
Hydroquinone	S	S
Hydrogen sulfide	S	S
Hypochlorous acid con't	S	S
Inks	S	S
Iodine crystals	O	O
Isobutyl alcohol	S	S
Isopropyl alcohol	S	S
Isopropyl ether	O	U
Kerosene	O	O
Lactic acid 10-90%	S	S
Lanolin	S	S
Lard	S	S
Lead acetate sat'd	S	S
Lead nitrate	S	S
Lemon juice	S	S
Lemon oil	O	U
Lime juice	S	S
Linseed oil	S	S
Magnesium carbonate sat'd	S	S
Magnesium chloride sat'd	S	S
Magnesium hydroxide sat'd	S	S
Magnesium nitrate sat'd	S	S
Magnesium sulfate sat'd	S	S
Mercuric chloride	S	S
Mercuric cyanide sat'd	S	S
Mercurous nitrate sat'd	S	S
Methyl ethyl ketone 100%	U	U
Methyl bromide	O	U
Methylsulfuric acid	S	S
Methylene chloride 100%	U	U
Milk	S	S

HIGH DENSITY POLYETHYLENE (HDPE)
CHEMICAL RESISTANCE
Continued

Legend: S = Satisfactory O = Some Attack U = Unsatisfactory

	70*F	140*F
Mineral Oils	S	U
Molasses	S	S
Mustard (prepared)	S	S
Naphtha	O	U
Napthalene	S	U
Natural gas (wet)	S	S
Nickel chloride sat'd	S	S
Nickel nitrate con't	S	S
Nickel sulfate	S	S
Nicotinic acid	S	S
Nitric acid 0-30%	S	S
Nitric acid 30-70%	S	O
Nitric acid 95-100%	U	U
Nitroglycerine	O	U
Octane	S	S
Oleum con't	U	U
Olive oil	S	S
Orange juice	S	S
Oxalic acid dilute	S	S
Oxalic acid sat'd	S	S
Ozone	O	O
Petroleum ether	U	U
Phosphoric acid 0-30%	S	S
Phosphoric acid 90%	S	S
Photographic solutions	S	S
Potassium bicarbonate sat'd	S	S
Potassium carbonate	S	S
Potassium chlorate sat'd	S	S
Potassium chloride sat'd	S	S
Potassium chromate 40%	S	S
Potassium cyanide sat'd	S	S
Potassium ferri cyanide	S	S
Potassium fluoride	S	S
Potassium nitrate sat'd	S	S
Potassium perborate sat'd	S	S
Potassium perchlorate 10%	S	S
Potassium sulfate con't	S	S
Potassium sulfide con't	S	S
Potassium sulfite con't	S	S
Potassium persulfate sat'd	S	S
Propargyl alcohol	S	S
Propylene glycol	S	S
Pyridine	S	O
Rayon coagulating bath	S	S
Resorcinol	S	S

	70*F	140*F
Salicylic acid	S	S
Sea water	S	S
Shortening	S	S
Silicic acid	S	S
Silver nitrate sol'n	S	S
Soap solution con't	S	S
Sodium acetate sat'd	S	S
Sodium benzoate 35%	S	S
Sodium bicarbonate sat'd	S	S
Sodium bisulfate sat'd	S	S
Sodium bisulfite sat'd	S	S
Sodium borate	S	S
Sodium carbonate con't	S	S
Sodium chlorate sat'd	S	S
Sodium dichromate sat'd	S	S
Sodium ferricyanide sat'd	S	S
Sodium ferricyanide	S	S
Sodium fluoride sat'd	S	S
Sodium hydroxide con't	S	S
Sodium hypochlorite	S	S
Sodium nitrate	S	S
Sodium nitrite	S	S
Sodium perborate	S	S
Sodium phosphate	S	S
Sodium sulfide 25% to sat'd	S	S
Sodium sulfite sat'd	S	S
Sodium thiosulphate	S	S
Soybean oil	S	S
Stannous chloride sat'd	S	S
Stannic chloride sat'd	S	S
Starch solution sat'd	S	S
Stearic acid 100%	S	S
Sulfuric acid 0-50%	S	S
Sulfuric acid 70%	S	O
Sulfuric acid 80%	S	U
Sulfuric acid 96%	O	U
Sulfuric acid 98% con't	O	U
Sulfuric acid fuming	U	U
Sulfurous acid	S	S
Tartaric acid	S	S
Tannic acid 10%	S	S
Tea	S	S
Tetrahydrofurane	O	O
Toluene	U	U
Tomato juice	S	S
Transformer oil	S	O
Trisodium phosphate sat'd	S	S
Trichloroethylene	U	U

	70*F	140*F
Turpentine	O	U
Urea	S	S
Urine	S	S
Vanilla extract	S	S
Vaseline	S	S
Vinegar common	S	S
Wetting agents	S	S
Whiskey	S	S
Wines	S	S
Xylene	U	U
Yeast	S	S
Zinc chloride sat'd	S	S
Zinc oxide	S	S
Zinc sulfate sat'd	S	S

NOTE: The above information concerns general chemical resistance only. Since other factors such as permeation, ESCR, and container design are involved full compatibility is recommended.