

## **Technical Data**

PolyConversions, Inc.

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## Chemical Resistance of VR<sup>™</sup> and PolyWear<sup>™</sup> Products

Chemical or Solvent	hemical or Solvent Concentration		olyWear ducts
		70°F	140°F
Acetaldehyde	100%	0	U
Acetic Acid (Glacial)	Conc.	0	U
Acetic Anhydride		U	U
Acetic Acid	1-10%	S	S
Acetic Acid	10-60%	S	0
Acetic Acid	80-100%	0	U
Acetone		S	S
Acetone	100%	U	U
Acrylic Emulsions		S	S
Allyl Alcohol		U	U
Allyl Chloride		U	U
Aluminum Chloride	Dilute	S	S
Aluminum Chloride	Conc.	S	S
Aluminum Fluoride	Conc.	S	S
Aluminum Hydroxide	Conc.	S	S
Aluminum Sulfate	Conc.	S	S
Alums (all types)	Conc.	S	S
Ammonia	100% Dry Gas	S	S
Ammonium Carbonate		S	S
Ammonium Chloride	Sat'd	S	S
Ammonium Carbonate	Conc.	S	S
Ammonium Chloride	Sat'd	S	S
Ammonium Fluoride	20%	S	S
Ammonium Hydroxide		S	S
Ammonium Hydroxide	35%	S	S
Ammonium Metaphosphate	Sat'd	S	S
Ammonium Nitrate	Sat'd	S	S
Ammonium Persullitt	Saťd	S	S
Ammonium Persulfate	Sat'd	S	S
Ammonium Sulfate	Sat'd	S	S
Ammonium Sulfide	Sat'd	S	S
Ammonium Thiocyanate	Sat'd	S	S
S = satisfactory (no attack) O = slight attack U = unsatisfactory			

S = satisfactory (no attack) O = slight attack U = unsatisfactory 70•F = 21•C, 140•F = 60•C

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Chemical or Solvent	Concentration		
		70°F	140°F
Ammonium Thiocyanst	Sat'd	S	S
Amyl Acetate	100%	U	U
Amyl Alcohol	100%	S	S
Amyl Chloride	100%	U	U
Aniline	100%	S	U
Aniline Hydrochloride	Saťd		U
Antimony Chloride		U	U
Aqua Acid		U	U
Aqua Regis		0	U
Arsenic Acid	100%	S	S
Barium Carbonate	Saťd	S	S
Barium Chloride	Sat'd	S	S
Barium Hydroxide	Saťd	S	S
Barium Sulfide	Sat'd	S	S
Beer		S	S
Benzene		U	U
Benzene Sulfonic Acid		S	S
Benzoic Acid	Sat'd	0	0
Benzoic Acid	All Conc.	S	S
Benzene Sulfonic Acid		S	S
Bismuth Carbonate	Sat'd	S	S
Black Liquor		S	S
Bleach Lye	10%	S	S
Borax	Sat'd	S	S
Borax	Cold Sat'd	S	S
Boric Acid	Conc.	S	S
Boric Acid	Dilute	S	S
Bromic Acid	10%	S	S
Bromic Acid	100%	U	U
Borax Cold	Sat'd	S	S
Bromic Acid	10%	S	S
Bromine Liquid	100%	U	U
Bromine Water		U	U
Butanediol	100%	S	S
Butanediol	60%	S	S
Butanediol	10%	S	S
Butyl Alcohol	100%	S	S
Butyric Acid	Conc.	U	U
Calcium Bisulfide		S	S
Calcium Carbonate	Sat'd	S	S
Calcium Chlorate	Sat'd	S	S
Calcium Chloride	Sat'd	S	S
S = satisfactory (no attack) (	) — alight attack		la at a m r

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	Chemical Resistance
PolvCa	

Chemical or Solvent	Concentration	VR & PolyWear Products	
		70°F	140°F
Calcium Hydroxide	Sat'd	S	S
Calcium Hydroxide		S	S
Calcium Hypochlorite	Bleach Sol'n	S	S
Calcium Nitrate	Saťd	S	S
Calcium Nitrate	50%	S	S
Calcium Sulfate		S	S
Camphor Oil		U	U
Carbon Dioxide	100% Dry	S	S
Carbon Dioxide	100% Wet	S	S
Carbon Dioxide	Cold Sat'd	S	S
Carbon Disulfide		U	U
Carbon Disulphide		U	U
Carbon Monoxide		S	S
Carbon Tetrachloride		U	U
Carbonic Acid		S	S
Caster Oil	Conc.	S	S
Chloracetic Acid	100%	U	U
Chlorine Moist Gas		0	U
Chlorine Liquid		U	U
Chlorine Water	2% Sat'd Sol	U	U
Chlorobenzene		U	U
Chloroform	100%	U	U
Chlorosulfonic Acid		U	U
Chrome Alum	Saťd	S	S
Chromic Acid	10-20%	S	0
Chromic Acid	20%	S	S
Chromic Acid & Sulfuric Acid		S	0
Chromic Acid	50%	S	0
Cider		S	S
Citric Acid	Saťd	S	S
Coconut Oil Alcohols		S	S
Cola Concentrates		S	S
Copper Chloride	Saťd	S	S
Copper Cyanide	Saťd	S	S
Copper Fluoride	2%	S	S
Copper Nitrate	Saťd	S	S
Copper Sulfate	Dilute	S	S
Copper Sulfate	Saťd	S	S
Cottonseed Oil	100%	S	S
Cottonseed Oil		S	S
Cresol	100%	U	U
Cresylic Acid	50%	S	S

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Chemical or Solvent	Concentration	VR & PolyWear Products	
		70°F	140°F
Cuprous Chloride	Saťd	S	S
Cyclohexane	100%	U	U
Cyclohexanone		U	U
Cyclohexanol	100%	S	S
Detergents, Synthetic		S	S
Developers Photographic		S	S
Dextrin	Saťd	S	S
Dextrose	Sat'd	S	S
Diazo Salts		S	S
Dibutylphthalate		0	0
Diethylene Glycol	100%	0	U
Diethylene Glycol		S	S
Diglycolic Acid		S	S
Dimethylamine		U	U
Dioctyl Phthalate		0	U
Disodium Phosphate	Saťd	S	S
Emulsions, Photographic		S	S
Ethyl Acetate	100%	0	0
Ethyl Alcohol	35%	S	S
Ethyl Alcohol	100%	S	S
Ethyl Butyrate	100%	0	U
Ethyl Chloride		U	U
Ethyl Ether	100%	U	U
Ethylene Chloride		U	U
Ethylene Chlorohydrin		U	U
Ethylene Dichloride		U	U
Ethylene Glycol		S	S
Ferric Chloride	Saťd	S	S
Ferric Nitrate	Saťd	S	S
Ferric Sulfate	Saťd	S	S
Ferrous Chloride	Saťd	S	S
Ferrous Sulfate		S	S
Fish Solubles		S	S
Fluoboric Acid		S	S
Fluorine		S	U
Fluosilicic Acid	32%	S	S
Fluosilicic Acid	Conc.	S	0
Fluoboric Acid		S	S
Fluorine		S	U
Fluosilicic Acid	32%	S	S

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		70°F	140°F
Fluosilicic Acid	Conc.	S	0
Formaldehyde	40%	S	S
Formic Acid	20%	S	S
Formic Acid	50%	S	S
Formic Acid	100%	S	S
Fructose	Sat'd	S	S
Fruit Pulp		S	S
Fuel Oil		0	U
Furfural	100%	U	U
Furfuryl Alcohol		U	U
Gallic Acid	Sat'd	S	S
Gasoline		U	S
Gin		U	U
Glucose		S	S
Glycerine		S	S
Glycol		S	S
Glycolic Acid	30%	S	S
Grape Sugar	Sat'd Aq.	S	S
Heptane	100%	U	U
Hydrobromic Acid	50%	S	S
Hydrocyanic Acid	Sa'd	S	S
Hydrochloric Acid	10%	S	S
Hydrochloric Acid	30%	S	S
Hydrochloric Acid	35%	S	S
Hydrochloric Acid	Conc.	S	S
Hydrofluoric Acid	40%	S	S
Hydrofluoric Acid	60%	S	S
Hydrofluoric Acid	75%	S	0
Hydroflurosllicic	31.1%	S	S
Hydrogen	100%	S	S
Hydrogen Bromide	10%	S	S
Hydrogen Chloride Gas	Dry	S	S
Hydrogen Peroxide	30%	S	0
Hydrogen Peroxide	90%	S	U
Hydrogen Phosphide	100%	S	S
Hydrogen Sulfide		S	S
Hydroquinone		S	S
Hypochlotous Acid	Conc.	S	S
Inks		S	S
lodine (in KI Sol'n)		0	U

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More detailed safety and disposal information on our products is contained in the Material Safety Data Sheet (MSDS). All users of our products are urged to retain and use the MSDS. You may request a copy by calling PolyCo Customer Service toll-free at (888) 893-3330.



Chemical or Solvent	Concentration		olyWear ducts
		70°F	140°F
Lactic Acid	10%	S	S
Lactic Acid	90%	S	S
Lead Acetate	Sat'd	S	S
Latex	100%	S	S
Lead Acetate	Saťd	S	S
Lead Tetra-Ethyle	100%	S	
Linseed Oil		0	U
Lube Oil		0	U
Magnesium Carbonate	Saťd	S	S
Magnesium Chloride	Sat'd	S	S
Magnesium Hydroxide	Saťd	S	S
Magnesium Nitrate	Sat'd	S	S
Magnesium Sulfate	Sat'd	S	S
Maleic Acid	Sat'd	S	S
Mercuric Chloride	Sat'd	S	S
Mercuric Cyanide	Sat'd	S	S
Mercurous Nitrate	Saťd	S	S
Mercury		S	S
Methyl Alcohol	100%	S	S
Methyl Bromide		0	U
Methyl Chloride		0	U
Methyl Ethyl Ketone	100%	U	U
Methylene Chloride	100%	U	U
Methylsufuric Acid		S	S
Milk		S	S
Mineral Oils		0	U
Molasses	Comm.	S	S
Naphtha	100%	S	U
Naphthalene		U	U
Nickel Chloride	Saťd	S	S
Nickel Nitrate	Con.	S	S
Nickel Nitrate	Conc.	S	S
Nickel Sulfate	Sat'd	S	S
Nicotinic Acid	100%	S	S
Nitric Acid	0-30%	S	S
Nitric Acid	30-50%	S	0
Nitric Acid	70%	S	0
Nitric Acid	95-98%	U	U
Nitrobenzene	100%	U	U
Octyl Cresol		0	U

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		VR & PolyWea Products	
		70°F	140°F
Oils and Fats		0	U
Oleic Acid	Conc.	0	U
Oleum	Conc.	U	U
Orange Extract	Dilute	S	S
Oxalic Acid	Dilute	S	S
Oxalic Acid	Sat'd	S	S
Oxygen	100%	S	
Ozone	100%	0	U
Perchloric Acid	10%	S	S
Petroleum Ether		U	U
Phenol	90%	U	U
Phosphoric Acid	0-30%	S	S
Phosphoric Acid	Over 30%	S	S
Phosphoric Acid	90%	S	U
Phosphorus (Yellow)	100%	S	
Phosphorus Pentoxide	100%	S	S
Phosphorus Trichloride		S	
Photographic Solutions		S	S
Pickling Baths			
Hydrochloric Acid		S	S
Sulfuric Acid		S	S
Sulfuric-Nitaric		S	
Pickling Baths,			
Sulfuric Acid		S	S
Hydrochloric Acid		S	S
Sulfuric-Nitric		S	
Picric Acid	1%	S	0
Plating Solutions		-	-
Brass		S	S
Cadmium		U	U
Chromium		S	S
Copper		S	S
Gold Indium		S S	S S
Lead		S S	S S
Nickel		S	S
Rhodium		S	S
Silver		S	S
Tin		S	S
Zinc		S	S

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Chemical or Solvent	emical or Solvent Concentration		olyWear ducts
		70°F	140°F
Plating Solutions Brass Cadmium Chromium Copper Gold Indium Lead Nickel Rhodium Silver Tin Zinc		S U S S S S S S S S S S	S U S S S S S S S S S S S S S S S S S S
Plating Solutions Brass Cadmium Chromium Copper Gold Indium Lead Nickel Rhodium Silver Tin Zinc		S S U S S S S S S S S S	S S S S S S S S S S S S S S S S S S S
Potassium Bicarbonate	Sat'd	S	S
Potassium Borate	1%	S	S
Potassium Bromate	10%	S	S
Potassium Bromide	Saťd	S	S
Potassium Carbonate		S	S
Potassium Chlorate	Saťd	S	S
Potassium Chloride	Saťd	S	S
Potassium Chromate	40%	S	S S
Potassium Cyanide	Sat'd	S	S
Potassium Dichromate	40%	S	S
Potassium Ferricyanide	Sat'd	S	S
Potassium Ferri/Ferro Cyanide		S	S
Potassium Fluoride		S S S	S S S
Potassium Hydroxide	20% Conc.	S	S
Potassium Nitrate	Sat'd	S	S
Potassium Petborate	Sat'd	S	S

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	Chemical	Resistance
PolyCo		

Chemical or Solvent	Concentration	VR & PolyWear Products	
		70°F	140°F
Potassium Perchlorate	Sat'd	S	S
Potassium Perchlorate	10%	S	S
Potassium Permanganate	20%	0	U
Potassium Persulfate	Sat'd	S	S
Potassium Sulfate	Conc.	S	S
Potassium Sulfide	Conc.	S	S
Potassium Sulfite	Conc.	S	S
Potassium Persullate	Saťd	S	S
Propargyl Alcohol		S	S
Propyl Alcohol		S	S
Propylene Dichloride	100%	U	U
Propylene Glycol		S	S
Rayon Coagulating Bath		S	S
Sea Water		S	S
Selenic Acid		S	S
Shortening		S	S
Silicic Acid		S	S
Silver Nitrate Sol'n		S	S
Soap Solution	Conc.	S	S
Sodium Acetate	Saťd	S	S
Sodium Benzoate	35%	S	S
Sodium Bicarbonate	Saťd	S	S
Sodium Bisulfate	Saťd	S	S
Sodium Bisulfite Sat'd	Sat'd	S	S
Sodium Borate		S	S
Sodium Bromide Oil Sol'n		S	S
Sodium Carbonate	Conc.	S	S
Sodium Chlorate	Sat'd	S	S
Sodium Chloride	Sat'd	S	S
Sodium Cyanide		S	S
Sodium Cyanide		S	S
Sodium Dichromate	Sat'd	S	S
Sodium Ferricyanide	Sat'd	S	S
Sodium Fluoride	Sat'd	S	S
Sodium Hydroxide	Conc.	S	S
Sodium Hypochlorite		S	S
Sodium Nitrate		S S S S	S
Sodium Sulfate		S	S
Sodium Sulfide	25%	S	S
Sodium Sulfide	Sat'd Sol'n	S	S
Sodium Sulfide	25% to Sat'd	S	S
Sodium Sulfite	Sat'd	S	S

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Chemical Resist	tance			
PolyCa		VR & P	olyWear	
Chemical or Solvent	Concentration		duct	
		70°F	140°F	
Stannic Chloride	Sat'd	S	S	
Stannous Chloride	Sat'd	S	S	
Starch Solution	Sat'd	S	S	
Stearic Acid	100%	S	S	
Sulfur	Colloidal	S		
Sulfur Dioxide	Dry, 100%	S	S	
Sulfur Dioxide	Wet, 100%	S		
Sulfur Trioxide	, i	S	S	
Sulfuric Acid	0-50%	S	S	
Sulfuric Acid	70%	S	0	
Sulfuric Acid	80%	S	U	
Sulfuric Acid	96%	0	U	
Sulfuric Acid	98% Conc.	0	U	
Sulfuric Acid Fuming		U	U	
Sulfurous Acid		S	S	
Tallow		S	0	
Tannic Acid	10%	S	S	
Tanning Extracts	Comm.	S	S	
Tartaric Acid	10%	S	S	
Tartaric Acid	Sat'd	U	U	
Tetralin		U	U	
Tetrahydrofuran	100%	U	U	
Toluene		U	U	
Tetrachloroethylene	100%	U	U	
Tetrahydrofurane		0	0	
Transformer Oil		0	U	
Trichloroacetic Acid	10%			
Trichloroethylene		U	U	
Triethanolamine	100%	S	U	
Trisodium Phosphate	Sat'd	S	S	
Turpentine		S	U	
Urea	Upt to 30%	S	S	
Urea	•	S	S	
Urine		S	S	
Vinegar	Comm.	S	S	
Vanilla Extract		S	S	

Wetting Agents

Zinc Chloride

S = satisfactory (no attack) 70•F = 21•C, 140•F = 60•C

Zinc Sulfate

Whiskey

Wines

**Xylene** 

Yeast

S

S

S

U

S

S

S

S

S

S

U

S

S

S

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Sat'd

Sat'd

O = slight attack U = unsatisfactory

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