ARPRO® Expanded Polypropylene (EPP) ARPAK® Expanded Polyethylene (EPE) Bead Foam

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Chemical Resistance of EPE/EPP Foam

EPE & EPP Foams are made from commercially available grades of polyethylene and/or polypropylene. These materials are resistant to a broad spectrum of solvents and chemicals. The data presented here was supplied by our base resin material supplier and refers to solid forms of the polymer. Due to the larger surface area and lower density of EPE & EPE foams, the chemical resistance may vary from that of the solid plastic. Because of this fact, and the variation of conditions from application to application, the following chart should be used ONLY AS A GUIDELINE to the actual in-use service of the EPE & EPP Foams.

RATING SYSTEM:

G = Good
F = Fair
X = Not Recommended

Substance at 70°F	EPE	EPP	Substance at 70°F	EPE	EPP
Acetaldehyde	G	F	Beeswax	G	G
Acetic acid, 10%	G	G	Benzaldehyde	G	G
Acetic acid, 100% (glacial)	G	G	Benezene	F	F
Acetic anhydride	G	G	Benzenesulphonic acid	G	G
Acetone	G	G	Benzoic acid	G	G
Acids, aromatic	G	G	Benzoyl chloride	F	F
Acrylonitrile	G	G	Borax	G	G
Allyl alcohol, 96%	G	G	Boric acid	G	G
Aluminum Chloride	G	G	Brine (saturated)	G	G
Alum	G	G	Bromine, liquid	X	X
Ammonia	G	G	Bromochloromethane	X	X
Ammonia, gaseous	G	G	Butanol	G	G
Ammonia salts	G	G	Butoxyl (Methoxy butyl acetate)	G	G
Amyl acetate	G	G	Butyl acetate	G	F
Aniline	G	G	Butyle glycol	G	G
Anisole	F	F	Butyric acid	G	G
Antimony trichloride	G	G	Calcium carbonate	G	G
Aqua regia	X	F	Calcium chloride	G	G
Beer	G	G	Calcium hypochlorite	G	G

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Calcium nitrate, 50%	G	G	p-Dichlorobenzene	F	F
Camphor	G	G	Dichloroethylene	X	G
Carbon disulphide	F	G	Diesel fuel oil	G	F
Carbon tetrachloride	X	X	Diethyl ether	F	F
Carbonic acid	G	G	Diisobutyl ketone	G	G
Castor oil	G	G	Dimethylamine	G	G
Caustic potash	G	G	Dimethyl formamide	G	G
Caustic soda	G	G	Dimethyl sulphoxide	G	G
Chloral hydrate	G	F	Dioxane	G	G
Chlorine, liquid	X	X	Emulsifiers	G	G
Chlorine, gas (dry)	F	X	Epichlorhydrin	G	G
Chlorine, gas (moist)	F	X	Esters, aliphatic	G	G
Chloroacetic acid (mono)	G	G	Ethanol, 96%	G	G
Chlorobenzene	F	G	Ether	F	F
Chloroethanol	G	G	Ethyl acetate	G	G
Chloroform	X	F	Ethylene chloride (Dichloroethane)	F	F
Chlorosulphonic acid	X	X	Ethylenediaminete-traacetic acid	G	G
Chromic acid, 80%	G	G	Ethylene glycol	G	G
Citric acid	G	G	Fatty acids (C6)	G	G
Clophen® A50 and A60	G	G	Ferric chloride	G	G
Coconut oil	G	G	Fluorine	X	X
Common salts (aqueous, saturated)	G	G	Fluosilicic acid	G	F
Copper salts	G	G	Formaldehyde (40% aqueous)	G	G
Corn oil	G	G	Formic acid	G	G
Creosote	G	G	Frigen	F	X
Cresol	G	G	Fruit juices	G	G
Cyclohexane	G	G	Fruit pulp	G	G
Cyclohexanol	G	G	Furfuryl alcohol	G	G
Cyclohexanone	G	G	Gasoline	G	G
Detergents, synthetic	G	G	Gelatine	G	G
Dibutyl ether	G	G	Gylcerine	G	G
Dibutyl phthalate	G	G	Glycol (concentrated)	G	G
Dichloroacetic acid, 50%	G	G	Gylcolic acid, 55%	G	G
Dichloroacetic acid, 100%	G	G	Gylcolic acid, 70%	G	G
Dichloroacetic acid, methyl ester	G	G	Glycolic acid butyl ester	G	G
o-Dichlorobenzene	F	F	Halothane	F	F
			Heating oil	G	G
			Hydraulic fluid	G	G
			Hydrazine hydrate	G	G

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Hydrobromic acid, 50%	G	G	Naphtha	G	G
Hydrochloric acid, all concentrations	G	G	Naphthalene	G	G
Hydrochloric acid gas, (dry and moist)	G	G	Nickel salts	G	G
Hydrocyanic acid	G	G	Nitric acid, 25%	G	G
Hydrofluoric acid, 40%	G	G	Nitric acid, 50%	F	F
Hydrofluoric acid, 70%	G	G	Nitrobenzene	G	G
Hydrogen peroxide, 30%	G	G	o-Nitrotoluene	G	G
Hydrogen peroxide, 90%	G	G	Nitrous gases	G	G
Hydrogen sulphide	G	G	Oils (ethereal)	F	F
Hydrosuphite (10%, aqueous)	G	G	Oils (vegetable and animal)	G	G
Iodine tincture, DAB 6 (German Pharmacopoeia)	G	G	Oleic acid, concentrated	G	G
Isooctane	G	G	Oleum	X	X
Isopropanol	G	G	Oxalic acid, 50%	G	G
Isopropyl ether	F	F	Ozone	F	G
Kerosene	G	G	Perchloric acid, 20%	G	G
Ketones	G	G	Perchloric acid, 50%	G	G
Lactic acid	G	G	Perchloric acid, 70%	G	G
Linseed oil	G	G	Petrol	G	G
Magnesium chloride	G	G	Petrol/Benzene mixture	G	G
Maleic acid	G	G	Petroleum ether	G	G
Maleic acid, 50%	G	G	Phenol	G	G
Menthol	G	G	Phosphates	G	G
Mercury	G	G	Phosphoric acid, 25%	G	G
Mercuric Chloride (corrosive sublimate)	G	G	Phosphoric acid, 50%	G	G
Methanol	G	G	Phosphoric acid, 95%	G	G
Methoxybutanol	G	G	Phosphorus oxychloride	G	G
Methylcyclohexane	F	G	Phosphorous pentoxide	G	G
Methylene chloride	F	F	Phosphoris trichloride	G	G
Methyl ethyl ketone	G	G	Photographic developers	G	G
Methyl glycol	G	G	Phtalic acid, 50%	G	G
Mineral oils	G	G	Polyglycols	G	G
Monochloroacetic acid	G	G	Glycolic acid butyl ester	G	G
Monochloroacetic acid ethyl ester	G	G	Potassium chloride	G	G
Morpholine	G	G	Potassium bichromate, 40%	G	G
Motor oils, HD oil	G	G	Potassium cyanide (aqueous, saturated)	G	G

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Potassium permanganate	G	G	Sulphurous acid	G	G
Potassium hydroxide 30% (aqueous)	G	G	Sulphuryl Chloride	G	G
Propionic acid, 50%	G	G	Tallow	G	G
Propionic acid, 100%	G	G	Tannic acid, 10%	G	G
Propylene glycol	G	G	Tartatic acid	G	G
Pseudocumene	F	F	Tetrabromoethane	X	X
Pyridine	G	F	Tetrachloroethane	X	X
Sea water	G	G	Tetrehydrofuran	X	X
Silicic acid	G	G	Toluene	X	X
Silicone oil	G	G	Transformer oil	G	G
Silver nitrate	G	G	Tributyl phosphate	G	G
Sodium benzoate	G	G	Trichloroacetic acid, 50%	G	G
Sodium borate	G	G	Trichloroacetic acid, 100%	G	G
Sodium carbonate	G	G	Trichlorethylene	X	F
Sodium chloride	G	G	Tricresyl phosphate	G	G
Sodium chlorite, 50%	G	G	Triethanolamine	G	G
Sodium chlorite bleach	F	G	Turpentine oil	F	X
Sodium dodecylbenzene-sulphonate	G	G	Urea, 33%	G	G
Sodium hydroxide (30%, aqueous)	G	G	Vaseline®	F	G
Sodium hypochlorite, all concentrations	G	G	White spirit	F	F
Sodium nitrate	G	G	P-Xylene	F	X
Sodium peroxide, 10%	G	G	Yeast	G	G
Sodium peroxide (saturated)	F	F	Zinc chloride	G	G
Sodium sulphide	G	G			
Sodium thiosulphate	G	G			
Speraceti	G	G			
Spindle oil	F	F			
Starch	G	G			
Stearic acid	G	G			
Succinic acid, 50%	G	G			
Sulphates	G	G			
Sulphur	G	G			
Sulphur dioxide (dry)	G	G			
Sulphur dioxide (moist)	G	G			
Sulphuric acid, 10%	G	G			
Sulphuric acid, 50%	G	G			
Sulphuric acid, 98%	G	G			

Clophen is a trademark of Bayer, Gmbh

Vaseline is a registered trademark of Chesebrough-Pond's Inc.

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