

## CHEMICAL COMPATIBILITY KEY AND USER NOTE:

This report is offered as a guide and was developed from information, which, to the best of ENPAC's knowledge, was reliable and accurate. Due to variables and conditions of application beyond ENPAC's control, none of the data shown in this guide is to be construed as a guarantee, expressed or implied. ENPAC, LLC assumes no responsibility, obligation, or liability in conjunction with the use or misuse of the information.

The data shown is the result of laboratory tests obtained from leading chemical companies and independent reports that are intended to serve only as a guide. Testing is not conducted by ENPAC LLC. No performance warranty is intended or implied. Confirmation of the validity and suitability in specific cases should be obtained. When considering flexible containment for specific applications, it is suggested that a fabric sample be tested in actual service before specification. Where impractical, tests should be devised which simulate actual service conditions as closely as possible.

Ratings are based on visual and physical examination of samples after removal from the test chemical. Results represent the material's ability to retain its performance properties when in contact with the indicated chemical.

The degree of chemical attack on any material is governed by the conditions under which it is exposed. Exposure time, temperature, and size of the area of exposure usually varies considerably in application, therefore, this table is given and accepted at the user's risk.

## INDUSTRIAL FABRIC - CHEMICAL COMPATIBILITY GUIDE #1

### CHEMICAL RESISTANCE FOR STINGER™ BERMS – BLACK

CHEMICAL	RATING				
FFFF	Y	Diesel Fuel	Y	Ivory Soap	Y
Acetic Acid (5%)	S	Ethanol	Y	Jet A	Y
Acetic Acid (50%)	N	Ethyl Acetate	N	JP-4 Jet Fuel	Y
Ammonium Phosphate	S	Ethyl Alcohol	Y	JP-5 Jet Fuel	Y
Ammonium Sulfate	S	Fertilizer Solution	Y	JP-8 Jet Fuel	Y
Antifreeze (ethylene glycol)	Y	#2 Fuel Oil	Y	Kerosene	Y
Animal Oil	Y	#6 Fuel Oil	Y	Magnesium Chloride	S
ASTM Fuel A (100% Iso-octane)	Y	Gasoline	S	Magnesium Hydroxide	S
ASTM Oil #2 (Flash pt. 240 C)	Y	Glycerin	Y	Methanol	Y
ASTM Oil #3	Y	Hydraulic Fluid-Petroleum Based	Y	Mineral Spirits	Y
Calcium Chloride Solutions	S	Hydraulic Fluid-	Y	Naphtha	Y
Calcium Hydroxide	S	Phosphate Ester Based	N	Nitric Acid (5%)	S
20% Chlorine Solution	Y	Hydrocarbon Type II	N	Nitric Acid (50%)	N
Clorox	Y	(40% Aromatic)	N	Perchloroethylene	N
Conc. Ammonium Hydroxide	Y	Hydrochloric Acid (50%)	Y	Phenol Formaldehyde	S
Corn Oil	Y	Hydrofluoric Acid (5%)	Y	Phosphoric Acid (50%)	Y
Crude Oil	Y	Hydrofluoric Acid (50%)	Y	Phosphoric Acid (100%)	N
		Hydrofluosilicic Acid	Y	Phthalate Plasticizer	N
		Isopropyl Alcohol	S	Potassium Chloride	S

## INDUSTRIAL FABRIC - CHEMICAL COMPATIBILITY GUIDE #2

### CHEMICAL RESISTANCE FOR STINGER YELLOW JACKET™, DRIPBLOW BERM™, SPILLPAD™ & SPILLPAL™ – YELLOW

CHEMICAL	RATING				
Ammonium Bifluoride	Y	Chloric Acid, 20%	Y	Green Liquor	Y
Ammonium Fluoride, 25%	Y	Chlorine, Liquid	S	Hydrochloric Acid, 50%	Y
Ammonium Hydroxide	Y	Citric Acid	Y	Hydrofluoric Acid, dilute	Y
Ammonium Sulfate	Y	Copper Nitrate	Y	Hydrogen Peroxide, 90%	Y
Amyl Acetate	S	Copper Sulfate	Y	Hydrogen Sulfide, aqueous	Y
Aqua Regia	Y	Corn Syrup	Y	Ketones	S
Beer	Y	Cottonseed Oil	Y	Linseed Oil	Y
Benzene	S	Detergents	Y	Magnesium Chloride	Y
Black Liquors	Y	Diethyl Ether	S	Methyl Alcohol	Y
Bleach 12.5%	Y	Dimethyl Hydraxine	S	Methyl Bromide	S
Boric Acid	Y	Disodium Phosphate	Y	Methyl Ethyl Ketone	S
Bromic Acid	Y	Ethers	S	Methylene Chloride	S
Butane	Y	Esters	S	Mineral Oil	Y
Butylene	Y	Ethyl Alcohol	Y	Naptha	Y
Calcium Chloride	Y	Ethylene Glycol	Y	Napthalene	S
Carbon Tetrachloride	S	Fatty Acids	Y	Nitric Acid, 30%	Y
Caronic Acid	Y	Formaldehyde	Y	Nitric Acid, 100%	S
Castor Oil	Y	Fructose	Y	Oleic Acid	Y
		Furfural	S	Phosphoric Acid, 85%	Y
		Gasoline	N	Potash	Y
		Gin	Y	Potassium Chloride	Y

## INDUSTRIAL FABRIC CHEMICAL COMPATIBILITY GUIDE #3

### CHEMICAL RESISTANCE FOR STINGER™ SPILLPAL W/REMOVABLE FOAM – TAN

CHEMICAL	RATING				
FFFF	Y	Ethanol	Y	Hydrofluoric Acid (50%)	Y
Acetic Acid (5%)	Y	#2 Fuel Oil	Y	Jet A	Y
Acetic Acid (50%)	N	#6 Fuel Oil	Y	JP-4 Jet Fuel	Y
20% Chlorine Solution	Y	Gasoline	S	JP-5 Jet Fuel	Y
Clorox	Y	Hydraulic Fluid- Petroleum Based	Y	JP-8 Jet Fuel	Y
Conc. Ammonium Hydroxide	Y	Hydraulic Fluid- Phosphate	N	Kerosene	Y
Diesel Fuel	Y	Hydrocarbon Type II (40% Aromatic)	N	Methanol	Y
		Hydrochloric Acid (50%)	Y	Methyl Alcohol	Y
		Hydrofluoric Acid (5%)	Y	Mineral Spirits	Y
				Naptha	Y

## DETAILED KEY:

**Y** = Products should be suitable for prolonged or repeated contact with these substances (under the specified conditions).

**S** = Products may be suitable for intermittent contact; however, some deterioration in properties may occur. The user should perform qualification tests before or during usage of the container.

**N** = Substances aggressively attack the product or have vapor pressures incompatible with closed containers.

## POLYETHYLENE - CHEMICAL COMPATIBILITY GUIDE #4

**Y** = YES, RECOMMENDED

**S** = SOMETIMES, SUITABLE INTERMITTENTLY

**N** = NO, NOT RECOMMENDED

### CHEMICAL RATING

Acetaldehyde (40%)	Y
Acetamide	Y
Acetic Acid (50%)	Y
Acetic Acid (100%)	N
Acetic Acid Anhydride	S
Acetic Ether	S
Acetone	Y
Acetylene Tetrabromide	S
Acrylic Emulsions	S
Acrylonitrile	Y
Adipic Acid	Y
Aliphatic Hydrocarbons (Hexane Octane, hexene, Octene, Etc.)	Y
Allyl Alcohol (96%)	Y
Alum (Aqueous Solutions)	Y
Aluminum Chloride (20%)	Y
Aluminum Fluoride	Y
Aluminum Hydrogen Solution (10%)	Y
Aluminum Hydroxide	Y
Alums (All Types)	Y
Ammonia (Anhydrous)	Y
Ammonia (Aqueous)	Y
Ammonia (100% Dry Gas)	Y
Ammonium Salts	Y
Ammonium Acetate	Y
Ammonium Bifluoride	Y
Ammonium Carbonate 50%	Y
Ammonium Chloride	Y
Ammonium Hydrogen Fluoride (50%)	Y
Ammonium Hydroxide	Y
Ammonium Metaphosphate Sat'd	Y
Ammonium Nitrate (10%)	Y
Ammonium Nitrate Sat'd	Y
Ammonium Persulfate Sat'd	Y
Ammonium Phosphate	Y
Ammonium Sulfate (1%)	Y
Ammonium Sulfate Sat'd	Y
Ammonium Sulfide Sat'd	Y
Ammonium Thiocyanate Sat'd	Y
Amyl Acetate	Y
Amyl Alcohol (100%)	Y
Amyl Chloride	N
Aniline (100%)	S
Aniline Hydrochloride	S
Animal Fats	Y
Anti-Freeze	Y
Antimony Salts	Y
Antimony Trichloride 90%	Y
Aqua Regia	N
Aqueous Salt Solutions (NaCl)	Y
Aqueous Alkalies (NaOH)	Y
Arsenic Acid	Y
Arsenic Salts	Y
Barium Salts	Y
Barium Carbonate	Y
Barium Chloride	Y
Barium Cyanide	Y
Barium Hydroxide	Y
Barium Nitrate	Y
Barium Sulfate	Y
Barium Sulfide	Y
Battery Fluid Acid	S
Beef Tallow Emulsion, Sulfonated	Y
Beer	Y
Benzaldehyde	Y
Benzene	Y
Benzene Sulfonic Acid	S
Benzoic Acid	Y
Benzyl Alcohol	Y
Benzyl Chloroformate	Y
Bismuth Salts	Y
Bleach Lye (10%)	S
Black Liquor	Y
Borax Cold Sat'd	Y
Boric Acid Dilute	Y
Boric Acid Conc.	Y
Bromine, Liquid	N
Bromine, Water	N
Bromobenzene	N
Bromoforn	N
Butadiene	Y
Butane	Y
Butanediol (100%)	Y
Butanol	Y
Butyl Acetate	Y
Butyl Alcohol (100%)	Y
Butylene	N
Butylene Glycol	Y
Butylene Liquid	N
Butyl Phenol	N
Butyric Acid	Y
Calcium Carbonate	Y
Calcium Chloride	Y
Calcium Hydroxide	Y
Calcium Hypochlorite	Y
Calcium Nitrate (50%)	Y
Calcium Sulfate	Y
Camphor Oil	N
Carbon Disulfide	N
Carbonic Acid (Aq.CO2)	Y
Carbon Monoxide	Y
Carbon Tetrachloride	N
Castor Oil Conc.	Y
Caustic (Aqueous)	Y
Caustic Potash Sol. (50%)	Y
Caustic Soda Sol. (10%)	Y
Chloral Hydrate	Y
Chloroethanol	Y
Chloric Acid (10%)	Y
Chloroacetic Acid	Y
Chlorobenzene	Y
Chloroform	N
Chloromethane	N
Chlorosulfonic Acid 100%	N
Chromic Acid (50%)	S
Cider	Y
Citric Acid (All Conc.)	Y
Clorox Bleach	Y
Coconut Oil Alcohols	Y
Cola Concentrates	Y
Compressed Air Conditioning Oil	Y
Copper Salts	Y
Copper Cyanide	Y
Copper Nitrate	Y
Copper Sulfate	Y
Corn Oil	Y
Cottonseed Oil	Y
Cresol (90%)	Y
Cresylic Acid	Y
Crotonic Aldehyde	Y
Cuprous Chloride Sat'd	Y
Cyclohexane	Y
Cyclohexanol	Y
Cyclohexanone	S
Detergents, General	Y
Developer, Photographic	Y
Dextrin Sat'd	Y
Dextrose Sat'd	Y
Dibutyl Ether	N
Dibutylphthalate	S
Dibutyl Sebacate	S
Dichloroacetic Acid	S
Dichloroacetic Acid, Methyl Ester	S
Dichlorobenzene, Liquid	N
Dichloroethylene	N
Diesel Fuel	S
Diesel Oil	S
Diethyl Carbonate	Y
Disodium Phosphate	Y
Diazo Salts	Y
Diethylene Glycol	Y
Diethanolamine	Y
Diglycolic Acid (30%)	Y
Di-Isobutyl Ketone	S
Dimethylamine	S
Dimethyl Formamide	S
Dimethyl Phthalate	N
Diocetyl Phthalate	N
Dioxane	Y
Diphenyl Oxide	N
Electrolyte	Y
Emulsions, Photographic	Y
Ethanol	Y
Ether	N
Ethyl Acetate (100%)	Y
Ethyl Alcohol	Y
Ethyl Butyrate	N
Ethyl Chloride	S
Ethyl Ether	N
Ethylene Chloride	N
Ethylene Chlorohydrin	Y
Ethylene Diamine	Y
Ethylene Dichloride	N
Ethylene Glycol	Y
Ethylene Oxide	N
Fatty Acids	Y
Fatty Alcohol Sulfonate	Y
Ferric Salts	Y
Ferric Sulfate	Y
Ferrous Salts	Y
Ferrous Sulfate	Y
Fertilizer Salts	Y
Fish Solubles	Y
Fluoboric Acid	Y
Fluoroboric Acid (All Conc.)	Y
Formaldehyde (40%)	Y
Formamide	N
Formic Acid (All Conc.)	Y
Fruit Pulp	Y
Fuel Oil	Y
Furfural (100%)	Y
Furfuryl Alcohol	N
Gallic Acid Sat'd	Y
Gasoline	Y
Gasohol	Y
Gelatine	Y
Gin	Y
Gluconic Acid (All Conc.)	Y
Glucose	Y
Glycerine	Y
Glycol	Y
Glycol Ethers	Y
Glycolic Acid (All Conc.)	Y
Grape Sugar Sat'd Aq.	Y
Heptane	Y
Hexane	Y
Hexanol Tert	Y
Hydrazine Hydrate	Y
Hydroxylite (10%)	Y
Hydroxylamine Sulfate	Y
Hydrazine (35%)	Y
Hydrazine Hydrochloride	Y
Hydroiodic Acid (All Conc.)	Y
Hydrobromic Acid (50%)	Y
Hydrocyanic Acid Sat'd	Y
Hydrochloric Acid (All Conc.)	Y
Hydrofluoric Acid (All Conc.)	Y
Hydrofluosilicic Acid (All Conc.)	Y
Hydrogen Bromide (10%)	Y
Hydrogen Peroxide (90%)	Y
Hydrogen Phosphide 100%	Y
Hydroquinone	Y
Hydrogen Sulfide	Y
Hypochlorous Acid	Y
Inks	Y
Iodine (Alc. Sol.) Conc.	Y
Iron Salts	Y
Iso-Octane	S
Isopropyl Acetate	Y
Isopropyl Alcohol	Y
Isopropyl Ether	N
Jet fuel	S
Kerosene	S
Lactic Acid (All Conc.)	Y
Lanolin	Y
Latex	Y
Lead Salts	Y
Lead Acetate Sat'd	Y
Lime	Y
Linseed Oil	Y
Lithium Salts	Y
Lube Oil	Y
Magnesium Salts	Y
Magnesium Carbonate	Y
Magnesium Hydroxide	Y
Magnesium Nitrate	Y
Magnesium Oxide	Y
Magnesium Sulfate	Y
Maleic Acid	Y
Malic Acid (1%)	Y
Mercuric Salts	Y
Mercurous Salts	Y
Mercury	Y
Methanol	Y
Methyl Acetate	Y
Methyl Alcohol (100%)	Y
Methyl Amine (32%) L	Y
Methyl Bromide	N
Methyl Chloride	N
Methylene Chloride	N
Methyl Ethyl Ketone	S
Methyl Isobutyl Ketone	S
Methyl Isopropyl ketone	S
Methyl Sulfate	Y
Methyl Sulfuric Acid (All Conc.)	Y
Milk	Y
Mineral Oils	Y
Molasses	Y
Monochloroacetic Acid Ethyl Ester	Y
Monochloroacetic Acid Methyl Ester	Y
Morpholin	Y
Mowliith D	Y
Muriatic Acid	Y
Naptha	S
Naphthalene	S
Nickel Salts	Y
Nicotine, Dilute	Y
Nicotinic Acid	Y
Nitric Acid (<50%)	Y
Nitrobenzene	Y
Nitrotoluene	S
Ocyl Cresol	Y
Oils and Fats	Y
Oleic Acid (All Conc.)	Y
Oleum Conc.	N
Olive Oil	Y
Orange Extract	Y
Oxalic Acid (All Conc.)	Y
Palmitic Acid	Y
Palm Oil	N
Paraffin Emulsions	Y
Paraffin Oil	Y
Perchloric Acid (50%)	Y
Perchloroethylene	N
Petroleum	S
Petroleum Ether	S
Phenol (90%)	N
Phenylhydrazine	N
Phosphoric Acid All Conc	Y
Phosphorous Chlorides	S
Phosphorous Yellow (100%)	Y
Phosphorous Pentoxide	Y
Photographic Solutions	Y
Phthalic Acid (All Conc.)	Y
Phthalic Anhydride	Y
Pickling Baths, Sulfuric Acid, Hydrochloric Acid	Y
Picric Acid (1%)	Y
Plating Solutions	Y
Potash	Y
Potassium/Aluminum Sulfates (50%)	Y
Potassium Bichromate	Y
Potassium Borate (10%)	Y
Potassium Bromide	Y
Potassium Chlorate	Y
Potassium Chloride	Y
Potassium Chromate	Y
Potassium Cyanide	Y
Potassium Dichromate 40%	Y
Potassium Ferri/ Ferro Cyanide Sat'd	Y
Potassium Fluoride	Y
Potassium Hydroxide	Y
Potassium Iodide	Y
Potassium Nitrate Sat'd	Y
Potassium Perborate Sat'd	Y
Potassium Perchlorate	Y
Potassium Permanganate	Y
Potassium Persulfate Sat'd	Y
Potassium Phosphates	Y
Potassium Sulfate	Y
Propanol	Y
Propargyl Alcohol (7%)	Y
Propionic Acid (50%)	Y
Propyl Alcohol	Y
Propylene Dichloride (100%)	Y
Propylene Glycol	Y
Propylene Oxide	Y
Pyridine	Y
Rayon Coagulation Salts	S
Rust Inhibitors	Y
Sea Water	Y
Selenic Acid	Y
Sewage	Y
Shortening	Y
Silicic Acid	Y
Silicone Oil	Y
Silver Salts	Y
Silver Nitrate	Y
Soda Solution (All Conc.)	Y
Soda Ash	Y
Sodium Salts	Y
Sodium Acetate Sat'd	Y
Sodium Acrylates	Y
Sodium Benzoate	Y
Sodium Bicarbonate	Y
Sodium Bisulfate (10%)	Y
Sodium Bisulfite	Y
Sodium Bromate	S
Sodium Bromide	Y
Sodium Bromide Dilute Sol.	Y
Sodium Carbonate	Y
Sodium Chlorate	Y
Sodium Chloride	Y
Sodium Chlorite	Y
Sodium Chromate	Y
Sodium Disulfite	Y
Sodium Dithionite (10%)	Y
Sodium Ferricyanide	Y
Sodium Ferrocyanide Sat'd	Y
Sodium Fluoride Sat'd	Y
Sodium Hydroxide Conc.	Y
Sodium Hypochlorite	Y
Sodium Iodide	Y
Sodium Nitrate	Y
Sodium Oxalate	Y
Sodium Persulfate	Y
Sodium Phosphate	Y
Sodium Silicate	Y
Sodium Sulfate	Y
Sodium Sulfide	Y
Sodium Sulfonate	Y
Spindle Oil	Y
Stannic Salts	Y
Stannous Salts	Y
Starch Solution Sat'd	