Your partner for a clean

1-800-HOT-HOGS® (468-4647)

Chemical Compatibility Guide for: High Density Polyethylene Overpaks and Utility Trays

NOTICE:

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

Chemical Resistance is a measure of effects under "No Load" conditions. During a chemical resistance test, many effects may appear, including:

Change in size or shape (swelling, shrinkage, distortion)

Change in color (absorption, extraction, chemical reaction)

Changes in weight (absorption, extraction)

Change in surface quality (crazing, cracking, loss of gloss, softening)

Change in physical properties, such as strength and stiffness

ASTM D43-60T TESTING

Recommended testing time is 7 (seven) days. However, 4 (four) weeks were used to obtain data presented here. In addition to the recommended testing temperature of 75° F, tests at 125° F were conducted. If no effects at 75° F were seen, and severe effects developed at 125° F, caution against long-term continuous exposure was indicated.

Chemical	75°	125°
Acetaldehyde	F	N
Acetic 5%	Е	Е
Acetic 25%	Е	Е
Acetic 50%	Е	Е
Acetic Glacial	Е	G
Acetic Anhydride	Е	Е
Acetone	Е	G
Acetophenone	G	G
Acetamide Powder	E	Е
Acetamide Saturated Solution	Е	Е
Acetyl-di-Alanine (Powder)	E	Е
Acetyl-di-Leucine-n	E	Е
Acetyl-di-Methionine-n (Powder)	E	Е
Acetyl-di-Tryptophan-n	E	Е
Acetyl-di-Vaine-n (Powder)	E	Е
Acetylene Tetrabromide	N	N
Acetophenetidin	Е	Е
Adipic Acid	Е	Е
Alanine-di	Е	Е
Allyl Alcohol	Е	Е
Aloin (Powder)	Е	Е
Aluminum Acetate	Е	Е
Aluminum Chloride 21%	Е	Е
Aluminum Chloride Saturated	Е	Е
Aluminum Fluoride	Е	Е
Aluminum Hydroxide	Е	Е
Aluminum Oxalate	Е	Е
Aluminum Oxide	Е	Е

Chemical	75°	125°
Lead Acetate: Crystals	Е	Е
Lead Acetate: Saturated	Е	Е
Lead Arsenate	Е	Е
Lead Nitrate	Е	Е
Lemon Juice	E	E
Lemon Oil	F	Р
Leucine-di (Powder)	Е	E
Lime Juice	E	E
Linseed Oil: Refined	E	E
Linseed Oil: Raw	E	E
Linseed Oil: Boiled	E	E
Lithium Bromide (Saturated)	E	E
Lysine-Monohydrochloride-di	E	E
Lysine-Dihydrochloride-di	E	E
Magnesium Bromide	E	E
Magnesium Carbonate	E	E
Magnesium Carbonate Saturated	Е	Е
Magnesium Chloride	G	G
Magnesium Chloride Sulfate	G	G
Magnesium Hydroxide	G	G
Magnesium Iodide (Sat.)	E	Е
Magnesium Nitrate	E	E
Magnesium Sulfate	G	G
Magnesium Sulfate 10%	Е	Е
Magnesium Sulfate 20%	Е	Е
(Saturated) Maleic Acid	E	E
Maleic Acid 10%	Е	E
Maleic Acid 25%	Е	Е

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Chemical	75°	125°
Aluminum Potassium Sulfate	E	E
Aluminum Sulfate Saturated	E	E
Aluminum Sodium Sulfate	E	E
Amino Acetic Acid (Glycine)	E	E
Aminobutric-a-di Acid	E	E
Aminoisbutyric-2 Acid	E	E
Ammonia	G	G
Ammonium Acetate (Saturated)	<u>G</u>	E
Ammonium Acetate (Saturateu)	_	_
Ammonium Aluminum Sulfate	Е	Е
Ammonium Bicarbonate	Е	Е
Ammonium Bifluoride	Е	Е
(Saturated)		
Ammonium Bromide	E	E
Ammonium Carbonate	<u>E</u>	E
Ammonium Carbonate Saturated	Е	E
Ammonium Chloride	E	Е
Ammonium Dichromate	G	G
(Saturated)		
Ammonium Fluoride (10%)	G	G
Ammonium Glycolate	G	G
Ammonium Hydroxide:5%	G	G
Ammonium Hydroxide:15%	Е	G
Ammonium Hydroxide:30%	G	F
Ammonium Hydroxide	G	F
Concentrated		
Ammonium Metaphosphate	G	G
Ammonium Molybdate	E	E
Ammonium Nitrate	G	G
Ammonium Oxylate	G	G
Ammonium Persulfate	G	G
Ammonium Phosphate	G	G
Ammonium Sulfate	G	G
Ammonium Sulfocyanide	E	E
Ammonium Thiocyanate	G	G
Ammonium Thioglycolate	G	G
Amyl-n-Alcohol	Е	G
Amyl Acetate-n	F	F
Amyl Chloride	N	N
Amyl Phthalate	Е	G
Aniline	G	F
Aniline Sulfate	G	G
Anise Seed Oil	F	Р
Anthranilic	Е	Е
Antimony Trichloride	G	G
Aqua Regia (3parts conc. HCL, 1	G	Р
part conc. HNO3		
Arsenic (Concentrated)	G	G
Arsenic Trioxide	G	G
Aspirin (Powder)	E	E
Atropine Sulfate	E	E
Barium Carbonato	E	E
Barium Carbonate	E	E
Barium Carbonate Saturated	E	E
Barium Chlorido Saturated	G	G
Barium Chloride Saturated	E	E

Chemical	75°	125°
Margarine	E	E
Mercapto Acetic Acid 95%	G	G
Mercuric Chloride	G	G
Mercuric Chloride 5%	E	G
Mercuric Chloride Saturated	E	G
Mercuric Cyanide	G	G
Mercurous Chloride	G	G
Mercurous Nitrate	G	G
Mesityl Oxide	Р	Р
Methionine-di (Powder)	Е	Е
Methoxyethyl Oleate	G	G
Methyl Acetate 82%	G	G
Methyl Alcohol	Е	Е
Methyl Amyl Alcohol	Е	Е
Methyl Bromide Liquid under 20	N	N
Methyl Bromoacetate	F	Р
Markey Chlavida Linuid and C	N.I.	N.I.
Methyl Chloride Liquid under 65	N	N
Methylcyclohexane	Р	N
Methyl Ethyl Ketone	G	G
Methyl Eugenol	N	N
Methyl Isobutyl Ketone	F	Р
Methyl Propyl Ketone	F	Р
Methyl Salicylate	G	G
Methylene Bromide	N	N
Methylene Chloride	F	N
Methylene Chlorobromide	F	N
Methylene Iodide	N	N
Milk: Regular	G	G
Milk: Dried	Е	E
Milk: Wet Paste (Instant)	E	E
Mineral Oil USP	E	G
Mannitol Alcohol	E	G
Mono-Di-Tri-Propylene Glycol	Е	E
Methylethers Monoethylaniline	G	F
Morpholine	G	F
Mustard (Prepared)	E	E
Naphtha (VMP)	N	N
Naphthalene: Crystals	G	P
Naphthalene: Vapors	G	P
Natural Gas (Wet)	Е	G
Nickel Chloride	G	G
Nickel Nitrate	G	G
Nickel Sulfate	G	G
Nitric Acid: 1%	E	E
Nitric Acid: 5%	E	E
Nitric Acid: 10%	E	G
Nitric Acid: 20%	G	G
Nitric Acid: 25%	G	G
Nitric Acid: 25 %	G	G
Nitric Acid: 50%	G	G
Nitric Acid: 65%	G	F

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Chemical	75°	125°
Barium Hydroxide	G	G
Barium Sulfate	G	G
Barium Sulfide	E	E
Beer	E	E
Benzaldehyde	G	F
Benzaldehyde 1% (In Isopropyl Alcohol)	Е	E
Benzaldehyde 5% (In Isopropyl Alcohol)	Е	Е
Benzaldehyde 10% (In Isopropyl Alcohol)	Е	G
Benzene	F	F
Benzene Hexachloride-g	G	G
Benzene Hexachloride-g 20%	N	N
(Lindane)		
Benzene Sulfonic Acid	G	G
Benzoic Acid: Crystals	Е	E
Benzoic Acid: Saturated	Е	Е
Benzoyl Alcohol	N	N
Benzoyl Alcohol 1.5%	G	G
Benzoyl Acetate	G	F
Bismuth Carbonate	G	G
Borax: Powder	Е	Е
Borax: Saturated	Е	Е
Boric Acid	Е	Е
Boric Acid 10%	Е	Е
Boric Acid Saturated Solution	Е	Е
Boron Trifluoride	G	G
Brine	E	E
Bromine	N	N
Bromo Toluene-m	N	N
Butadiene	N	N
Butanane-2 4p-Methoxy Phenol	N	N
Butter	E	E
Butyl-n Alcohol	Е	E
Butyl-Sec Alcohol	E	G
Butyl-tert Alcohol	E	F
Butyl Acetate-n	G	F
Butyl Chloride	N	l N
Butylphenol-di-sec	N	N
Butyl-n Stearate	G	G
Butylphenol-di-tert	N	N
Butyric-n Acid	N	N
Butyaldehyde	N	N
Cadmium Bromide	E	E
		_
Caffeine Citrate (Saturated) Calcium Carbonate	E	E
Calcium Carbonate Calcium Chlorate	G E	G E
		_
Calcium Chloride (Saturated)	E	E
Calcium Chloride Sulfate	E	E
Calcium Hydroxide	Е	E
(Concentrated) Calcium Hypochlorite Powder	G	G
Calcium Hypochlorite -20%	E	G
Calcium Hypochlorite (Saturated)	E	G
Calcium Nitrate	E	E

Chemical	75°	125°
Nitric Acid: 70% (Concentrated)	G	Р
Nitrobenzene	N	N
Nitroglycerine	G	N
Nitrosyl Chloride	N	N
Nitrous Acid	N	N
Nonyl-n Alcohol	E	E
Nutmeg Oil	N	N
	E	E
Octane-n		
Octyl-n Alcohol	Е	G
Octyl Cresol	F	N
Oleic Acid	Е	Е
Olive Oil	Е	Е
Orange Juice	E	E
Orange Juice Concentrated	Е	Е
Orange Oil	N	N
Orange Peelings (Fresh)	Е	E
Oxalic Acid: Powder	Е	Е
Oxalic Acid: Saturated	Е	Е
Ozone	G	F
Palmitic Acid (Powder)	E	E
Palm Oil	E	E
Parachlordine	F	F
Paraffin Oil	G	F F
Paraldehyde	G E	G E
Peanut Butter	_	
Pentachlorophenol	E	G
Pentachlorophenol Dowicide "G"	Е	G
Pentachlorophenol Dowicide "G" Sodium Salt 10%	G	G
Pentachlorophenol Dowicide "G"	E	E
Sodium Salt Powder		
Pepper (Fresh Ground)	G	G
Peppermint Oil	G	Р
Perchloric Acid	Е	E
Perchlorethylene	N	N
Petroleum Jelly	Е	E
Phenol-Crystals	F	N
Phenol 5%	E	G
Phenolsulfonic Acid	E	E
Phenoxyacetic Acid	E	Е
Phenyl Ethyl Alcohol	Е	G
Phenyl Glycine Potassium Salt	Е	G
Phenyl Hydrazine	G	F
Phenylphenol-o	Е	E
Phenylphenol-p	Е	Е
Phenylphenol-o Sodium Salt	Е	Е
Phosphoric Acid: 1-5%	Е	Е
Phosphoric Acid: 10%	Е	E
Phosphoric Acid: 25%	E	E
Phosphoric Acid: 30%	E	E
	E	E
Phosphoric Acid: 50% Phosphoric Acid: 85%	E	E
Phosphoric Anhydride	E	E
rnosphoric Allityuride		

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Chemical	75°	125°
Calcium Nitrate Saturated	E	G
Calcium Oxide: Powder	E	E
Calcium Oxide: Fowder Calcium Oxide: Saturated	E	E
		E
Calcium Salicylate	E	
Calcium Sulfate	E	E
Camphor Crystals	E	G
Camphor Oil	N	N
Carbazole	E	E
Carbon Bisulfide	N	N
Carbon Dioxide	G	G
Carbon Monoxide	G	G
Carbon Tetrachloride	Р	Р
Carnuba Wax	Е	Е
Carrot Juice	Е	E
Castor Oil U.S.P.	E	E
Catsup	E	E
Cedar Leaf Oil	P	N
Cedar Wood Oil	N	N
Cellosolve Acetate	G	F
Cesium Bromide	E	E
Cetyl Alcohol	E	F
Chlorine:10% in air	F	N
Chlorine:100%	F	N
Chlorine: 10% moist	F	N
Chloro-1, Nitropropane-1	N	N
Chloro-2, Phenylphenol-4	G	F
Chloroacetic Acid (Powder)	Е	Е
Chlorobenzene	N	N
Chloroform	F	Р
Chlorophenol-o	N	N
Chloropropionic Acid	E	G
Chlorosulphonic Acid	N	N
Chromic Acid:10%	E	E
Chromic Acid: 20%	E	E
Chromic Acid: 50%	E	E
Chromic Acid: Plating Solution	E	E
	G	G
Chromic and Sulfuric Acid Mix Cinnamon	E	E
Cinnamon Oil	N	N
Citric Acid: Crystals	E	E
Citric Acid: 10%	E	E
Citronella Oil	F	N
Cloves (Ground)	G	G
Clove Oil	G	F
Coconut Oil	Е	G
Cod Liver Oil	Е	E
Coffee: Ground	E	E
Coffee: Instant Powder	E	E
Copper Chloride	G	G
Copper Chloride Saturated	E	E
Copper Cyanide	E	E
Copper Cyaniue	_ L	

Chemical	75°	125°
Phthalic Anhydride	G	G
Phosphorous Oxychloride	N	N
Phosphorous Pentachloride	N	N
Phosphorous Trichloride	G	N
Picric Acid	Е	G
Pine Oil	G	F
Pine Needle Oil	N	N
Polyethylene Glycol Monolaurate	Е	Е
Polyglycol E-300 to 3-4000	G	G
Potassium Aluminum Chloride	G	G
50%		
Potassium Aluminum Sulfate (Saturated)	G	G
Potassium Bicarbonate	G	G
Potassium Bisulfate	E	E
Potassium Bisulfate Saturated	E	G
Potassium Borate	G	G
Potassium Bromate (Powder)	E	E
Potassium Bromate Saturated	E	E
Solution		
Potassium Bromide	Е	G
Potassium Bromide 3%	Е	Е
Potassium Bromide Saturated	Е	Е
Potassium Carbonate	G	G
Potassium Chlorate	G	G
Potassium Chloride	G	G
Potassium Chloride Sulfate	Е	E
Potassium Cyanide	G	G
Potassium Dichromate Saturated	G	G
Potassium Ferricyanide	G	G
Potassium Ferricyanide25%	Е	Е
Potassium Ferricyanide	Е	Е
Saturated	_	-
Potassium Hydroxide	E	E
Potassium Hydroxide 1%	E	E
Potassium Hydroxide 10%	E	E
Potassium Hydroxide 30%	E	E
Potassium Hydroxide 50%	E	E
Potassium Hydroxide Concentrated	Е	Е
Potassium Iodide	Е	Е
Potassium Iodide Saturated	E	Е
Potassium Manganate	Е	Е
Potassium Nitrate	G	G
Potassium Permanganate	G	G
Potassium Permanganate	G	G
Saturated		_
Potassium Persulfate	E	E
Potassium Sulfate	E	E
Potassium Sulfate Saturated	E	E
Potassium Sulfide Saturated	E	E
Propage Cas	E	E
Propagal Alcohol	N G	N G
Propargyl Alcohol Propyl Dichloride	P	
Propylene Dibromide	N P	N N
Propylene Dichloride	N N	N N
Fropylene Dichloride	IN	IVI

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Chemical	75°	125°
Copper Fluoroborate	Е	Е
Copper Nitrate	E	E
Copper Sulfate	E	E
Copper Sulfate Saturated	E	E
Corn Oil	E	E
Cottonseed Oil	E	E
Cranberry Sauce	E	E
Cresol	N	N
Cumyl Phenol-p	N	N
Cuprous Oxide	E	E
Cyanoacetic Acid	E	E
Cyclohexyl Alcohol	E	E
Cyclohexane	N	N
	F	F
Cyclohexanone	-	-
Decalin Debugger	N	N
Dehydrocetic Acid Powder	E	E
Dehydrocetic Acid 1%	E	G
Diacetone	E	F
Dibutoxyethyl Phthalate	Е	G
Dibutyl Phthalate	Е	G
Dibutyl Sebacate	E	G
Dichlorobenzene-p (Paradow)	F	Р
Dichlorobenzene-o	N	N
Dichloro-Diphenyl- Trichloroethane (75% D.D.T.)	Е	G
Diethanolamine	G	G
Diethyl Benzene	N	N
Diethyl Ether	N	N
Diethyl Ketone	F	F
Diethyl Malonate	Е	G
Diethyl Phthalate	E	E
Diethylene Glycol	E	E
Diethylene Glycol Butyl Ether	E	E
Diethylene Glycol Ethyl Ether	E	E
Diethylene Glycol Methyl Ether	E	E
Diethylene Triamine	E	E
Dihydroxyhenylalanine-34-di	Е	G
Dimethyl-dichloro-vinyl-	G	G
<u>phosphate</u> Dimethyl Formamide	Е	E
Dioctyl Phthalate	E	G
Dioxane-1,4	F	F
Diphenyl Amine	E	G
Diphenyl Oxide	F	P
	-	-
Dipropylene Glycol	E	E
Dipropylene Glycol Methyl Ether	E	G
Ethyl Alcohol: 40%	G	G
Ethyl Alcohol: Absolute	G	G
Ethyl Alcohol: Formula 30 (USP)	Е	Е
Ethyl Alcohol: 2-B-95%	Е	Е
Ethyl Acetate	G	G
Ethyl Acetate 85-88%	G	G
Ethyl Benzene	N	N

Chemical	75°	125°
Propylene Glycol	Е	E
Propylene Glycol Methyl Ether	E	E
Propylene Oxide	G	F
Quinine Sulfate	G	G
Resorcinol: Powder	E	E
Resorcinol: Saturated	E	E
Resorcinol: 5%	E	E
Salicyladehyde	G	G
Salicylic Acid: Powder	E	E
Salicylic Acid: Saturated	E	E
Salicylic Ointment	G	G
Sassafras Oil	G	F
Serine-di	E	E
Sesame Oil	G	G
Silver Acetate	E	E
Silver Nitrate	E	E
Silver Nitrate Saturated	E	G
Sodium Acetate: Powder	E	E
Sodium Acetate: Fowder Sodium Acetate: Saturated	E	E
Sodium Aluminum Sulfate	E	E
Sodium Aluminum Sulfate	E	E
Saturated		_
Sodium Benzoate: Powder	Е	Е
Sodium Benzoate: Saturated	Е	Е
Sodium Bicarbonate	Е	Е
Sodium Bicarbonate Saturated	E	E
Sodium Bisulfate	Е	Е
Sodium Bisulfate Saturated	Е	Е
Sodium Bisulfite	Е	E
Sodium Bisulfite 4%	Е	E
Sodium Bisulfite Saturated	Е	E
Sodium Borate	Е	Е
Sodium Borate Saturated	E	Е
Sodium Bromate	E	Е
Sodium Bromate 10%	Е	Е
Sodium Bromate - Sodium	Е	Е
Sodium Bromide (Saturated)	Е	Е
Sodium Carbonate	Е	E
Sodium Carbonate 2%	Е	Е
Sodium Carbonate 7%	Е	Е
Sodium Carbonate 20%	Е	Е
Sodium Carbonate Saturated	Е	Е
Sodium Chlorate	G	G
Sodium Chloride	G	G
Sodium Chloride 3%	G	G
Sodium Chloride Saturated	G	G
Sodium Chloride Sulfate	Е	Е
Sodium Chloroacetate	Е	Е
Sodium Chloroacetate Powder	Е	E
Sodium Chloroacetate Saturated	Е	E
Sodium Dichromate	E	E
Sodium Dichromate Saturated	G	G

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Chemical	75°	125°
Ethyl Benzoate	F	F
Ethyl Bromoacetate	G	G
Ethyl Butyrate	F	F
Ethyl Chloride: Gas	N	N
Ethyl Chloride: Liquid	N	N
Ethyl Chloroacetate	G	G
Ethyl Cyanoacetate	E	E
Ethyl Lactate	E	E
Ethyl Monochloro Acetate	G	G
Ethyl Salicylate	F	F
Ethyl Chloride	N	N
Ethyl Chlorohydrin	N	N
Ethyl Diamine	F	G
Ethylene Dichloride	N	N
Ethylene Glycol	E	E
Ethylene Glycol Butyl Ether	F	G
Ethylene Glycol Ethyl Ether	F	E
Ethylene Glycol Methyl Ether	F	F
Ethylene Glycol Phenyl Ether	F	F
	P	P
Ethylene Oxide Ethylene Trichloride	N N	N N
Eugenol	N	N
Ferric Ammonium Sulfate: Crvstals	E	E
Ferric Ammonium Sulfate: Saturated	E	E
Ferric Chloride	Е	Е
Ferric Chloride 40%	G	G
Ferric Chloride Saturated	G	G
Ferric Nitrate	G	G
Ferric Sulfate	Е	Е
Ferric Sulfate Saturated	Е	Е
Ferrous Ammonium Citrate	G	G
Ferrous Chloride	G	G
Ferrous Chloride Saturated	G	G
Ferrous Sulfate	G	G
Ferrous Sulfate 15%	G	G
Ferrous Sulfate 40%	G	G
Ferrous Sulfate Saturated	G	G
Fluoboric	G	G
Fluorine	F	N
Fluosilicic	G	G
Fluosilicic 20%	G	G
Formaldehyde: 10%	E	G
Formaldehyde: 30%	Е	Е
Formaldehyde: 37%	G	F
Formaldehyde: 40%	G	F
Formic Acid: 3%	G	G
Formic Acid: 10%	G	G
Formic Acid: 25%	G	G
Formic Acid: 50%	G	G
Formic Acid: 90%	G	G
	1 –	
	G	G
Formic Acid: 98-100% Furaldehyde-2	G	G

Chemical	75°	125°
Sodium Ferricyanide	G	G
Sodium Fluoride	E	Е
Sodium Fluoride Saturated	E	Е
Sodium Hydroxide	E	Е
Sodium Hydroxide 10%	E	Е
Sodium Hydroxide 30%	Е	Е
Sodium Hydroxide 50%	Е	Е
Sodium Hydroxide Saturated	Е	Е
Sodium Hypochlorite: 5%	Е	Е
Chlorine	_	_
Sodium Hypochlorite: 15%	G	G
Sodium Nitrate	E	E
Sodium Nitrate Saturated	E	E
Sodium Nitrite	E	E
Sodium Perborate	E	E
Sodium Perborate Saturated	E	E
Sodium Phosphate	E	E
Sodium Phosphate Saturated	E	E
Sodium Salicylate (Powder)	E	E
Sodium Silicate	E	E
Sodium Sulfate	E	E
Sodium Sulfate Saturated	E	E
Sodium Sulfide	E	E
Sodium Sulfide 25%	G	G
Sodium Sulfite	Е	Е
Sodium Sulfite Saturated	E	E
Sodium Tetraborate (Borax):	G	G
Powder Sodium Tetraborate (Borax):	G	G
Saturated Solution	G	G
Sodium Thiosulfate	Е	Е
Sodium Thiosulfate Saturated	Е	Е
Sorbitol	Е	Е
Soybean Oil	E	E
Spearmint Oil	Р	F
Sperm Oil	E	E
Spermacet	Е	Е
Spruce Oil	Р	N
Stannic Chloride	Е	Е
Stannous Chloride	Е	Е
Stearic Acid (Crystals)	Е	Е
Strontium Bromide	Е	Е
Strontium Salicylate: Powder	Е	Е
Strontium Salicylate: Saturated	E	E
Sucrose	E	E
Sulfur Chloride	N	N
Sulfur Dioxide: Dry	Е	Е
Sulfur Dioxide: Moist	Е	Е
Liquid under 46 psi pressure	N	N
Sulfuric Acid:1-6%	Е	Е
Sulfuric Acid:10%	Е	Е
Sulfuric Acid:20%	Е	Е
Sulfuric Acid:40%	Е	Е
Sulfuric Acid:60%	Е	Е
Sulfuric Acid:80%	G	F
Sulfuric Acid:98%	Е	G

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Chemical	75°	125°
Gallic Acid: Powder	E	E
Gallic Acid: Fowder Gallic Acid: Saturated	E	G
	-	
Gasoline: Aviation	P	P
Gasoline: Ethyl	F	Р
Gasoline: Regular	Р	Р
Gasoline: White	Р	Р
Glycerine	E	Е
Glycerol Triacetate	F	Р
Glucose	E	Е
Grape Juice	E	Е
Grapefruit Juice	E	Е
Grapefruit Juice Concentrated	E	Е
Heptane-n	F	Р
Heptyl-2-Alcohol	G	G
Hexachlorobenzene	Е	Е
Hexane	Р	Р
Hexyl-n Alcohol	Е	G
Hexyl-2 Alcohol	Е	G
Hydrobromic	E	Е
Hydrobromic 40%	Е	Е
Hydrobromic 50%	E	Е
Hydrochloric: 1-5%	E	Е
Hydrochloric: 10%	E	Е
Hydrochloric: 20%	E	Е
Hydrochloric: 30%	E	Е
Hydrochloric: 35%	E	G
Hydrochlorous	E	Е
Hydrocyanic	E	E
Hydrofluoric: 4%	G	G
Hydrofluoric: 40%	G	G
Hydrofluoric: 48%	G	G
Hydrogen	Е	Е
Hydrogen Peroxide: 1%	Е	Е
Hydrogen Peroxide: 3%	Е	E
Hydrogen Peroxide: 12%	Е	Е
Hydrogen Peroxide: 30%	Е	Е
Hydrogen Peroxide: 90%	Е	Е
Hydroxylamine Hydrochloride (Conc.)	Е	Е
Hydroquinone: Powder	Е	Е
Hydroquinone: Saturated	G	G
Hypochlorous Acid	Е	Е
Isobutyl Alcohol	E	Е
Iodine Crystals	F	F
Iso-octane	F	F
Isoleucine-di	E	E
Isoppropyl Alcohol	E	E
Isopropyl Acetate	F	P
Isopropyl Benzene	N	N
Isopropylphenol-o	N	N
Isopropylphenol-p	N	N
Kerosene	F	F
Lactic Acid: 3%	G	G
Lactic Acid: 10%	G	G
	1	

Chemical	75°	125°
Sulfur Ointment	E	E
Sulfurous Acid:5%	E	E
Sulfurous Acid: 6%	E	E
Sulfurous Acid:10%	E	E
Sulfurous Acid: Concentrated	E	E
Sulfur Trioxide	G	G
Sulfuryl Chloride	N	N
Tannic Acid:Powder	E	E
Tannic Acid:1%	E	E
Tannic Acid:170	E	E
Tannic Acid:Saturated	E	E
Tartaric:Powder	E	E
Tartaric:Saturated	E	E
Tea (Brewed)	E	E
Tea (Brewed) Moist Leaves	E	E
Tea (Brewed) Instant	E	E
Tea (Instant Paste)	E	E
Tetrachloroethane	N	N
Tetrachlorophenol-2, 3, 4, 6	Е	F
Tetrahydrofuran	F	Р
Tetralin	N	N
Thioglycolic Acid	Е	E
Thionyl Chloride	N	N
Titanium Tetrachloride	N	N
Toluene	F	F
Tomato Juice	Е	Е
Tribromethylbenzene	N	N
Trichloroacetic (Crystals)	G	Р
Trichlorobenzene-1, 2, 4	N	N
Trichloroethane	N	N
Trichloroethylene	N	N
Trichlorophenol-2, 4, 5	G	Р
Trichlorophenol, Sodium-2, 4, 5	E	G
Trichlorophenol, Sodium Salt 5% 2.4.5	G	G
Tricresyl Phosphate	Е	E
Triethanolamine	Е	E
Triethanolamine 5 - 50%	Е	Е
Trithylene Glycol	Е	E
Triethyleneteframine	G	G
Tripropylene Glycol	Е	E
Tripropylene Glycol Methyl Ether	E	Е
Trisodium Phosphate:Powder	Е	E
Trisodium Phosphate:Saturated	Е	G
Tryptophan-di (Powder)	E	E
Turkey Red Oil	G	G
Turpentine	F	F
Tyrosine-di (Powder)	E	E
Undecyl Alcohol	Е	F
Urea	G	G
Valine-di (Powder)	E	E
Vanilla Extract	E	E
Vaseline	E	E
Versene Fe-3 (Liquid)	Е	E

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Chemical	75°	125°
Lactic Acid: 85%	G	G
Lanolin	Е	Е
Lard	Е	Е
Lauryl Alcohol	G	G
Lauryl Sulfate	G	G
Lauryl Sulfate Saturated	G	G

KEY:

Pure reagents were used in these tests. This report shows their effects on High Density Polyethylene (HDPE) according to the following grading system:

E = Excellent (Unaffected in any way)

G = Good (Very slight discoloration - Expected life: months to years)

F = Fair (Slight etching, discoloration and/or dimensional change - Expected life: weeks to months)

P = Poor (Considerable change - Expected life: days)

N = Not Recommended (Severe effect. HDPE became soft in hours; unusable in a few days)

S = Solvent

Chemical	75°	125°
Versenol (Powder)	Е	E
Vinegar	E	E
Vinyl Chloride	N	N
Vinylidene Chloride	N	N
Walnut Oil	G	G
Water	E	Е
Water (Distilled)	E	Е
Whiskey	E	Е
Xylene-O	N	N
Yeast	E	E
Zepharin Chloride(Benzalkonium Chloride)	G	G
Zinc Bromide	Е	Е
Zinc Carbonate	Е	Е
Zinc Carbonate Saturated	E	E
Zinc Chloride:Powder	E	E
Zinc Chloride:50% Solution	Е	Е
Zinc Chloride:Saturated	E	E
Zinc Hydrosulfite (10%)	E	E
Zinc Oxide	E	E
Zinc Oxide Saturated	Е	Е
Zinc Oxide Ointment	Е	Е
Zinc Sulfate	Е	Е
Zinc Sulfate Saturated	Е	Е
Zinc Stearate	Е	Е

Chemical resistance of HDPE molding material at room temperature.

Chemical	Room Temp.	
Acids, Inorganic:Weak	Е	
Acids, Inorganic:Strong	Е	
Acids, Inorganic:Strong Oxidizing	G	
Acids, Organic:Weak	Е	
Acids, Organic:Strong	Е	
Alcohols	Е	
Aldehydes	Е	
Amines:Aliphatic	Е	
Amines:Aromatic	Е	
Bases	Е	
Beverages	Е	
Condiments	Е	

Chemical	Room Temp.
Esters	G
Foodstuffs	Е
Glycols:Polyglycols	Е
Glycols:Polyglycols Ethers	Е
Hydrocarbons:Aliphatic	N
Hydrocarbons: Aromatic	N
Hydrocarbons:Chlorinated	N
Insecticides	G
Ketones	G
Oils:Essential Oils	F
Oils:Vegetable Oils	Е
Pharmaceuticals	Е
Salts	E

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