



R = Resistant  
 LR = Limited Resistant  
 NR = Not Recommended  
 ND = No Data

## HDPE Chemical Resistance Chart

Chemical Name	Resistance Level		Chemical Name	Resistance Level	
	20oC(68F)	60oC(140F)		20oC(68F)	60oC(140F)
Acetaldehyde	R	R	Carbon disulphide	R	NR
Acetic acid (10%)	R	R	Carbonic acid	R	R
Acetic acid (glac./anh.)	R	R	Carbon tetrachloride	NR	NR
Acetic anhydride	R	R	Caustic soda & potash	R	R
Acetone	R	R	Cellulose paint	R	R
Other ketones	R	R	Chlorates of Na, K, Ba	R	R
Acetonitrile	R	R	Chlorine, dry	LR	NR
Acetylene	R	R	Chlorine, wet	LR	NR
Acid fumes	R	R	Chlorides of Na, K, Ba	R	R
Alcohols	R	R	Chloroacetic acid	R	R
Aliphatic esters	R	R	Chlorobenzene	NR	NR
Alkyl chlorides	R	R	Chloroform	NR	NR
Alum	R	R	Chlorosulphonic acid	NR	NR
Aluminium chloride	R	R	Chromic acid (80%)	R	NR
Aluminium sulphate	R	R	Citric acid	R	R
Ammonia, anhydrous	R	R	Copper salts (most)	R	R
Ammonia, aqueous	R	R	Cresylic acids (50%)	R	R
Ammonium chloride	R	R	Cyclohexane	NR	NR
Amyl acetate	R	R	Detergents, synthetic	R	R
Aniline	R	R	Emulsifiers, concentrated	R	R
Aromatic solvents	R	NR	Esters	ND	ND
Ascorbic acid	R	R	Ether	R	R
Beer	R	R	Fatty acids (>C6)	R	R
Benzaldehyde	R	ND	Ferric chloride	R	R
Benzoic acid	R	R	Ferrous sulphate	R	R
Boric acid	R	R	Fluorinated refrigerants	R	NR
Brines, saturated	R	R	Fluorine, dry	NR	NR
Bromide (K) solution	R	R	Fluorine, wet	NR	NR
Butyl acetate	R	LR	Fluorosilic acid	R	R
Calcium chloride	R	R	Formaldehyde (40%)	R	R



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Formic acid	R	R	Mercuric chloride	R	R
Fruit juices	R	R	Mercury	R	R
Gelatine	R	R	Methanol	R	NR
Glycerine	R	R	Methylene chloride	LR	NR
Glycols	R	R	Milk products	R	R
Glycol, ethylene	R	R	Moist air	R	R
Glycolic acid	R	R	Molasses	R	R
Hexamethylene diamine	R	R	Monoethanolamine	ND	ND
Hexamine	R	R	Naptha	NR	NR
Hydrazine	R	R	Napthalene	R	ND
Hydrobromic acid (50%)	R	R	Nickel salts	R	R
Hydrochloric acid (10%)	R	R	Nitrates of Na, K and NH3	R	R
Hydrochloric acid (conc.)	R	R	Nitric acid (<25%)	R	R
Hydrocyanic acid	R	R	Nitric acid (50%)	R	NR
Hydrofluoric acid (40%)	R	R	Nitric acid (90%)	NR	NR
Hydrofluoric acid (75%)	R	R	Nitric acid (fuming)	NR	NR
Hydrogen peroxide (30%)	R	R	Nitrite (Na)	R	R
Hydrogen peroxide (30 - 90%)	R	NR	Nitrobenzene	NR	NR
Hydrogen sulphide	R	R	Oils, diesel	R	NR
Hypochlorites	R	R	Oils, essential	R	NR
Hypochlorites (Na 12-14%)	R	R	Oils, lubricating + aromatic additives	R	R
Iso-butyl-acetate	ND	ND	Oils, mineral	R	R
Lactic acid (90%)	R	R	Oils, vegetable and animal	R	NR
Lead acetate	R	R	Oxalic acid	R	R
Lead perchlorate	ND	ND	Ozone	R	LR
Lime (CaO)	R	R	Paraffin wax	R	R
Maleic acidR	R		Perchloric acid	R	R
Manganate, potassium (K)	R	R	Petroleum spirits	R	R
Meat juices	R	R	Phenol	R	R
Phosphoric acid (50%)	R	R	Phosphoric acid (20%)	R	R



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Phosphoric acid (95%)	R	R	Tartaric acid	R	R
Phosphorous chlorides	NR	NR	Trichlorethylene	R	NR
Phosphorous pentoxide	R	R	Urea (30%)	R	R
Phthalic acid	R	R	Vinegar	R	R
Picric acid	R	R	Water, distilled.	R	R
Pyridine	R	R	Water, soft	R	R
Salicyl aldehyde	R	R	Water, hard	R	R
Sea water	R	R	Wetting agents (<5%)	R	R
Silicic acid	R	R	Yeast	R	R
Silicone fluids	R	R	Zinc chloride	R	R
Silver nitrate	R	R			
Sodium carbonate	R	R			
Sodium peroxide	R	ND			
Sodium silicate	R	R			
Sodium sulphide	R	R			
Stannic chloride	R	R			
Starch	R	R			
Sugar, syrups & jams	R	R			
Sulphamic acid	ND	ND			
Sulphates (Na, K, Mg, Ca)	R	R			
Sulphites	R	R			
Sulphonic acids	ND	ND			
Sulphur	R	NR			
Sulphur dioxide, dry	R	R			
Sulphur dioxide, wet	R	R			
Sulphur dioxide (96%)	R	R			
Sulphur trioxide	NR	NR			
Sulphuric acid (<50%)	R	R			
Sulphuric acid (70%)	R	R			
Sulphuric acid (95%)	R	R			
Sulphuric acid, fuming	R	NR			
Sulphur chlorides	ND	ND			
Tallow	R	ND			
Tannic acid (10%)	R	R			

