

## CHEMICAL RESISTANCE DATA FOR POLYETHYLENES

[ R = Resistant  
Resistant]

LR= Low Resistance

NR= Not

Agent	LDPE/ LLDPE		HDPE	
	23°C	60°C	23°C	60°C
Acetaldehyde(100%)	LR	NR	LR	NR
Acetic acid (10%)	R	R	R	R
Acetic acid (50%)	R	LR	R	LR
Acetic anhydride	NR	NR	NR	NR
Air	R	R	R	R
Alum (all kinds)	R	R	R	R
Aluminium chloride (all conc.)	R	R	R	R
Aluminium Fluoride (all conc.)	R	R	R	R
Aluminium sulphate (all conc.)	R	R	R	R
Ammonia (100% dry gas)	R	R	R	R
Ammonium carbonate	R	R	R	R
Ammonium chloride (sat.sol'n)	R	R	R	R
Ammonium fluoride (sat. sol'n)	R	R	R	R
Ammonium hydroxide (10%)	R	R	R	R
Ammonium nitrate (sat sol'n)	R	R	R	R
Ammonium persulphate (sat.sol'n)	R	R	R	R
Ammonium sulphate (sat sol'n)	R	R	R	R
Amyl acetate (100%)	NR	NR	NR	NR
Amyl acetate alcohol	R	R	R	R
Amyl chloride (100%)	NR	NR	NR	NR
Aniline (100%)	NR	NR	NR	NR
Aqua regia	NR	NR	NR	NR
Aromatic hydrocarbons	NR	NR	NR	NR
Arsenic acid (all conc.)	R	R	R	R
Ascorbic acid (10%)	R	R	R	R
Barium carbonate (sat.sol'n)	R	R	R	R
Barium chloride(sat.sol'n)	R	R	R	R
Barium hydroxide	R	R	R	R
Barium sulphate (sat.sol'n)	R	R	R	R
Barium sulphide (sat.sol'n)	R	R	R	R
Beer	R	R	R	R
Benzene	NR	NR	NR	NR
Benzoic acid (all conc.)	R	R	R	R
Bismuth carbonate (sat sol'n)	R	R	R	R
Borax (sat'd)	R	R	R	R
Boric acid (all conc.)	R	R	R	R
Boron trifluoride	R	R	R	R
Brass plating solutions	R	R	R	R
Brine	R	R	R	R
Bromine (liquid)	NR	NR	NR	NR
Butanediol (10%)	R	R	R	R
Butanediol (100%)	R	R	R	R

Butanediol (60%)	R	R	R	R
Butyl Alcohol (100%)	R	R	R	R
Butyric acid (all conc.)	NR	NR	NR	NR
Cadmium plating solutions	R	R	R	R
Calcium disulfide	R	R	R	R
<b>Agent</b>	<b>LDPE/ LLDPE</b>		<b>HDPE</b>	
Calcium carbonate (sat. sol'n)	R	R	R	R
Calcium chlorate (sat sol'n)	R	R	R	R
Calcium chloride (sat son'n)	R	R	R	R
Calcium hydroxide (all conc.)	R	R	R	R
Calcium hypochlorite (bleach sol.)	R	R	R	R
Calcium nitrate (50%)	R	R	R	R
Calcium oxide (sat sol'n)	R	R	R	R
Calcium sulphate	R	R	R	R
Camphor oil	NR	NR	NR	NR
Carbon dioxide (all conc.)	R	R	R	R
Carbon disulfide	NR	NR	NR	NR
Carbon monoxide				
Carbon tetrachloride	NR	NR	NR	NR
Carbonic acid	R	R	R	R
Castor oil (all conc.)	R	R	R	R
Chemical photographic solution	R	R	R	R
Chlorine (100% dry gas)	LR	LR	LR	LR
Chlorine water (2% sat.sol'n)	R	R	R	R
Chlorobenzene	NR	NR	NR	NR
Chloroform	NR	NR	NR	NR
Chlorosulphonic acid (100%)	NR	NR	NR	NR
Cider	R	R	R	R
Citric acid (sat'd)	R	R	R	R
Coconut oil alcohol	R	R	R	R
Coffee	R	R	R	R
Cola concentrates	R	R	R	R
Copper chloride (sat.)	R	R	R	R
Copper cyanide (sat.)	R	R	R	R
Copper fluoride (2%)	R	R	R	R
Copper nitrate (sat.)	R	R	R	R
Copper plating solutions	R	R	R	R
Copper sulfate (sat.)	R	R	R	R
Corn oil	R	R	R	R
Cotton oil	R	R	R	R
Cytric acid (sat.)	R	R	R	R
Detergent synthetic	R	R	R	R
Dextrin (sat.sol'n)	R	R	R	R
Dextrose (sat.sol'n)	R	R	R	R
Diazo salts	R	R	R	R
Dibutylphtalate	LR	Lr	LR	LR
Dichlorobenzene (ortho-para)	NR	NR	NR	NR
Diethyl ketone	LR	LR	LR	LR

Diethylene glycol	R	R	R	R
Diglycolic acid	R	R	R	R
Dimethylamine	NR	NR	NR	NR
Ethyl acetate (100%)	LR	LR	LR	LR
Ethyl alcohol (100%)	R	R	R	R
Ethyl alcohol (100%)	R	R	R	R
Ethyl alcohol (35%)	R	R	R	R
Ethyl benzene	NR	NR	NR	NR
Ethyl chloride	NR	NR	NR	NR
<b>Agent</b>	<b>LDPE/ LLDPE</b>		<b>HDPE</b>	
Ethyl ether	NR	NR	NR	NR
Ethylene glycol	R	R	R	R
Ferric chloride (sat.sol'n)	R	R	R	R
Ferric nitrate (sat.sol'n)	R	R	R	R
Ferrons chloride (sat.sol'n)	R	R	R	R
Ferrous sulphate	R	R	R	R
Fluoboric acid	R	R	R	R
Fluosilicic acid (32%)	R	R	R	R
Fluosilicic acid (conc.)	R	LR	R	LR
Formic acid (all conc.)	R	R	R	R
Fructose (sat'd)	R	R	R	R
Fruit pulp	R	R	R	R
Furfural (100%)	NR	NR	NR	NR
Futuryl alcohol (100%)	NR	NR	NR	NR
Gallic acid (sat'd)	R	R	R	R
Gasoline	NR	NR	NR	NRE
Glucose	R	R	R	R
Glycerine	R	R	R	R
Glycol	R	R	R	R
Glycolic acid (30%)	R	R	R	R
Gold plating solutions	R	R	R	R
Hexachlorobenezene	R	R	R	R
Hexanol tertiary	R	R	R	R
Hydrobromic acid (50%)	R	R	R	R
Hydrochloric acid (all conc.)	R	R	R	R
Hydrochloric acid (dry gas)	R	R	R	R
Hydrocyanic acid	R	R	R	R
Hydrofluoric acid (40%)	R	R	R	R
Hydrofluoric acid (60%)	R	R	R	R
Hydrogen (100%)	R	R	R	R
Hydrogen sulphide	R	R	R	R
Hydroquinone	R	R	R	R
Hypochlorous acid (conc.)	R	R	R	R
Iodine (in ki sol'n)	LR	LR	LR	LR
Lead acetate	R	R	R	R
Lead nitrate	R	R	R	R
Lead plating (sol'n)	R	R	R	R
Lead plating (sol'n)	R	R	R	R

Leaven	R	R	R	R
Liquid chloride	NR	NR	NR	NR
Lye	R	R	R	R
Magnesium carbonate (sat'd)	R	R	R	R
Magnesium chloride (sat'd)	R	R	R	R
Magnesium hydroxide (sat'd)	R	R	R	R
Magnesium nitrate (sat'd)	R	R	R	R
Magnesiumsulphate (sat'd)	R	R	R	R
Mercury	R	R	R	R
Methyl alcohol (100%)	R	R	R	R
Methyl chloride (100%)	R	R	R	R
Milk	R	R	R	R
Mineral oils	LR	NR	R	LR
<b>Agent</b>	<b>LDPE/ LLDPE</b>		<b>HDPE</b>	
n-Butyl acetate (100%)	LR	NR	NR	NR
n-Butylalcohol (100%)	R	R	R	R
n-Heptane	NR	NR	NR	NR
n-Octane	R	R	R	R
n-Propyl alcohol	R	R	R	R
Naphtha	LR	NR	LR	NR
Naphthalene	NR	NR	NR	NR
Nicket chloride	R	R	R	R
Nicket nitrate	R	R	R	R
Nicket plating solutions	R	R	R	R
Nicket sulphate	R	R	R	R
Nictine (dilluted)	R	R	R	R
Nitric acid (0.30%)	R	R	R	R
Nitric acid (30.50%)	R	R	R	R
Nitric acid (70%)	R	R	R	R
Nitric acid (95-98%)	NR	NR	NR	NR
Nitrobenzene (110%)	NR	NR	NR	NR
Oxalic acid (sat'd)	R	R	R	R
Perchlore-ethylene	NR	NR	NR	NR
Potassium bicarbonate	R	R	R	R
Potassium bromide	R	R	R	R
Potassium carbonate	R	R	R	R
Potassium chlorate	R	R	R	R
Potassium chloride	R	R	R	R
Potassium chromate (40%)	R	R	R	R
Potassium cyanide	R	R	R	R
Potassium dichromate (40%)	R	R	R	R
Potassium terri cyanide II	R	R	R	R
Potassium terri cyanide III	R	R	R	R
Potassium fluoride	R	R	R	R
Potassium hydroxide (conc.)	R	R	R	R
Potassium nitrate	R	R	R	R
Potassium perchlorate (10%)	R	R	R	R
Potassium permanganate (20%)	R	R	R	R

Potassium persulphate	R	R	R	R
Potassium sulphate (conc)	R	R	R	R
Potassium sulphite (conc.)	R	R	R	R
Propargyl alcohol	R	R	R	R
Propylene dichloride (100%)	NR	NR	NR	NR
Propylene glycol	R	R	R	R
Pyridine	R	R	R	R
Resorcinol	R	R	R	R
Salicylic acid (sat'd)	R	R	R	R
Sea water	R	R	R	R
Selenic acid	R	R	R	R
Silver nitrate (sol'n)	R	R	R	R
Silver plating solutions	R	R	R	R
Soap solution (all conc.)	R	R	R	R
Sodium acetate	R	R	R	R
Sodium benzoate (35%)	R	R	R	R
Sodium bicarbonate	R	R	R	R
<b>Agent</b>	<b>LDPE/ LLDPE</b>		<b>HDPE</b>	
Sodiumbisulphate	R	R	R	R
Sodium bisulphite	R	R	R	R
Sodium borate	R	R	R	R
Sodium bromide	R	R	R	R
Sodium carbonate	R	R	R	R
Sodium chlorate	R	R	R	R
Sodium chloride	R	R	R	R
Sodium cyanide	R	R	R	R
Sodium dichromate	R	R	R	R
Sodium ferro/terri cyanide	R	R	R	R
Sodium fluoride	R	R	R	R
Sodium hydroxide	R	R	R	R
Sodiumhypochlorite	R	R	R	R
Sodium nitrate	R	R	R	R
Sodium phosphate (mono)	R	R	R	R
Sodium phosphate (tri)	R	R	R	R
Sodium sulphate	R	R	R	R
Sodium sulphide	R	R	R	R
Sodium sulphite	R	R	R	R
Stannic chloride	R	R	R	R
Stannous chloride	R	R	R	R
Starch (sat.sol'n)	R	R	R	R
Steraric acid (100%)	R	R	R	R
Sulphuric acid (0.50%)	R	R	R	R
Sulphuric acid (70%)	R	LR	R	LR
Sulphuric acid (80%)	R	NR	R	NR
Sulphuric acid (96%)	LR	NR	LR	NR
Sulphuric acid (98% conc.)	LR	NR	LR	NR
Sulphuric acid (tuming)	NR	NR	NR	NR
Sulphuous acid	R	R	R	R

Tannic acid (sat'd)	R	R	R	R
Tetrahydrofurane	NR	NR	LR	NR
Tin plating solutions	R	R	R	R
Titanium tetrachloride	NR	NR	NR	NR
Toluene	NR	NR	NR	NR
Trichloroethylene	NR	NR	NR	NR
Triethylene glycol	R	R	R	R
Turpentine	NR	NR	LR	LR
Urea (30%)	R	R	R	R
Vanila Extract	R	R	R	R
Vinegar	R	R	R	R
Water	R	R	R	R
Wetting agents	R	R	R	R
Whisky	R	R	R	R
Wines	R	R	R	R
Xylene	NR	NR	NR	NR
Zinc bromide	R	R	R	R
Zinc chloride	R	R	R	R
Zinc oxide	R	R	R	R
Zinc sterate	R	R	R	R
Zinc sulphate	R	R	R	R