

# CHEMICAL RESISTANCE OF PLASTICS

Excellent resistance - can withstand use over a long period of time without change in physical, optical or chemical properties.

Reagent	LDPE		HDPE		PP		PMP (TPX)		PVC		PC		PS		SAN		ABS		ACRYLIC		PTFE		PFA		E-CTFE	
Temperature °C	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50
Acetaldehyde																										
Acetic Acid																										
Acetic Anhydride																										
Acetone																										
Acetyl Chloride																										
Ammonium Chloride (10%)																										
Ammonium Hydroxide (30%)																										
Amyl Acetate																										
Aniline																										
Aqua Regia																										
Benzaldehyde																										
Benzene																										
Benzoic Acid																										
Boric Acid (10%)																										
Bromine Gas (Dry)																										
Bromine Water																										
Butyl Acetate																										
Butyl Alcohol																										
Butyric Acid																										
Calium Hydroxide (Saturated)																										
Carbon Disulphide																										
Carbon Tetrachloride																										
Chlorine Gas (Dry)																										
Chlorine Water																										
Chloroform																										
Citric Acid																										
Cresol																										
Cyclohexane																										
Dibutylphthalate																										
p-Dichlorobenzene																										
Diethyl Ether																										
Diethylene Glycol																										
Dimethyl Formamide																										
Dioxane																										
Ethyl Acetate																										
Ethyl Alcohol																										
Ethyl Chloride																										
Ethyl Oxide																										
Fluorine Gas (Dry)																										
Formaldehyde (Formalin)																										
Formic Acid (90%)																										
Fuel Oil																										

This chart gives general guidelines only on the chemical resistance of plastics. There are many factors which influence chemical resistance - always test for your own application before selecting the appropriate Azlon product. If you have any doubts, please contact our Technical Dept. for advice.

Good general resistance - minor attack may occur after long periods of storage.

Limited resistance - product can be used for brief mixing and measuring.

Poor resistance - product becomes unstable on contact with chemical.

No information available.

Reagent	LDPE		HDPE		PP		PMP (TPX)		PVC		PC		PS		SAN		ABS		ACRYLIC		PTFE		PFA		E-CTFE	
Temperature °C	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50
Glycerine (Glycerol)	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good
Hexane	Limited	Poor	Limited	Poor	Limited	Poor	Limited	Poor	Limited	Poor	Limited	Poor	Limited	Poor	Limited	Poor	Limited	Poor	Limited	Poor	Good	Good	Good	Good	Good	Good
Hydrobromic Acid (25%)	Good	Good	Good	Good	Good	Good	Poor	Poor	Good	Limited	Poor	Poor	Poor	Poor	Limited	Limited	Limited	Limited	Limited	Limited	Good	Good	Good	Good	Good	Good
Hydrochloric Acid (35%)	Good	Limited	Good	Good	Good	Limited	Good	Limited	Good	Limited	Poor	Poor	Limited	Limited	Limited	Limited	Limited	Limited	Limited	Limited	Good	Good	Good	Good	Good	Good
Hydrofluoric Acid (35%)	Good	Good	Good	Good	Good	Good	Good	Good	Limited	Limited	Limited	Poor	Limited	Limited	Limited	Limited	Limited	Limited	Limited	Limited	Good	Good	Good	Good	Good	Good
Hydrogen Peroxide (30%)	Good	Limited	Good	Good	Good	Limited	Good	Limited	Good	Good	Good	Good	Good	Good	Good	Good	Limited	Poor	Good	Good	Good	Good	Good	Good	Good	Good
Lactic Acid	Good	Good	Good	Good	Good	Good	Good	Limited	Good	Limited	Limited	Limited	Limited	Limited	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good
Methyl Acetate	No info	No info	No info	No info	Good	Limited	No info	No info	Poor	Poor	No info	No info	Poor	Poor	Poor	Poor	Poor	Poor	No info	No info	Good	Good	Good	Good	No info	No info
Methyl Alcohol	Good	Good	Good	Good	Good	Good	Limited	Good	Good	Limited	Limited	Limited	Limited	Limited	Limited	Limited	Limited	Limited	Limited	Limited	Good	Good	Good	Good	Good	Good
Methyl Ethyl Ketone	Limited	Limited	Limited	Limited	Good	Limited	Limited	Limited	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Good	Good	Good	Good
Methylene Chloride	Poor	Poor	Limited	Limited	Limited	Limited	Limited	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Good	Good	Good	Good
Mineral Oil	Limited	Poor	Good	Limited	Good	Limited	Good	Limited	Good	Limited	Good	Good	Good	Good	Good	Good	Good	Good	Good	No info	Good	Good	Good	Good	Good	Good
Napthalene (crystalline)	Poor	Poor	Limited	Poor	Good	Good	No info	No info	Poor	Poor	No info	No info	Limited	Poor	Limited	Poor	Poor	Poor	No info	No info	Good	Good	Good	Good	Good	Good
Nitric Acid (10%)	Good	Good	Good	Good	Good	Good	Good	Good	Good	Limited	Good	Limited	Limited	Limited	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good
Nitric Acid (70%)	Poor	Poor	Limited	Limited	Limited	Limited	Limited	Limited	Poor	Poor	Limited	Limited	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Good	Good	Good	Good
Nitrobenzene	Poor	Poor	Limited	Limited	Good	Limited	Limited	Limited	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Good	Good	Good	Good
Oleum	Poor	Poor	Limited	Limited	Limited	Limited	Limited	Limited	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Good	Good	Good	Good
Oxalic Acid	Limited	Limited	Good	Good	Good	Limited	Good	Limited	Good	Limited	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good
Perchloric Acid (20%)	Good	Limited	Good	Limited	Limited	Limited	Limited	Limited	Good	Limited	Poor	Poor	Limited	Limited	Limited	Limited	Limited	Limited	Limited	Limited	Good	Good	Good	Good	Good	Good
Petrol	Limited	Poor	Limited	Limited	Limited	Limited	Limited	Limited	Good	Limited	Limited	Limited	Poor	Poor	Limited	Limited	Limited	Limited	Limited	Limited	Good	Good	Good	Good	Good	Good
Petroleum Ether	Limited	Poor	Limited	Limited	Limited	Limited	Limited	Limited	Good	Limited	Limited	Limited	Poor	Poor	Limited	Limited	Limited	Limited	Limited	No info	Good	Good	Good	Good	Good	Good
Phosphoric Acid (85%)	Good	Limited	Good	Limited	Good	Good	Good	Good	Good	Limited	Good	Limited	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good
Photographic Developer	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	No info	No info	Good	Good	Limited	Limited	No info	No info	No info	No info	Good	Good	Good	Good	Good	Good
Photographic Fixer	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	No info	No info	Good	Good	Limited	Limited	No info	No info	Limited	Limited	Good	Good	Good	Good	Good	Good
Potassium Hydroxide (50%)	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Poor	Poor	Good	Limited	Good	Limited	Good	Limited	Limited	Limited	Good	Good	Good	Good	Good	Good
Potassium Permanganate (20%)	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Limited	Limited	Limited	Limited	Good	Good	Good	Good	Good	Good
Propylene Glycol	Good	Good	Good	Good	Good	Good	Good	Limited	Good	Limited	Limited	Limited	Good	Good	Good	Good	Good	Good	No info	No info	Good	Good	Good	Good	Good	Good
Pyridine	Good	Good	Good	Good	Good	Good	Limited	Limited	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	No info	No info	Good	Good	Good	Good	Good	Poor
Salicylic Acid	Good	Good	Good	Good	Good	Limited	Good	Limited	Good	Good	Limited	Limited	Limited	Limited	Limited	Limited	Limited	Limited	No info	No info	Good	Good	Good	Good	Good	Good
Silver Nitrate	Good	Good	Good	Good	Good	Limited	Limited	Poor	Good	Limited	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good
Sodium Hydroxide (50%)	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Poor	Poor	Limited	Limited	Good	Good	Good	Good	Poor	Poor	Good	Good	Good	Good	Good	Good
Sodium Hypochlorite (20%)	Limited	Limited	Limited	Limited	Good	Limited	Good	Limited	Good	Limited	Limited	Limited	Limited	Limited	Limited	Limited	Limited	Limited	Good	Good	Good	Good	Good	Good	Good	Good
Sodium Thiosulphate	Good	Good	Good	Good	Good	Good	No info	No info	Good	Good	Good	Good	Good	Good	Limited	Limited	Good	Limited	No info	No info	Good	Good	Good	Good	Good	Good
Sulphuric Acid (10%)	Good	Good	Good	Good	Good	Good	Good	Good	Good	Limited	Good	Good	Limited	Limited	Limited	Limited	Good	Good	Good	Limited	Good	Good	Good	Good	Good	Good
Sulphuric Acid (98%)	Limited	Poor	Limited	Limited	Limited	Limited	Limited	Limited	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Limited	Poor	Poor	Poor	Good	Good	Good	Good	Good	Good
Tetrahydrofuran	Poor	Poor	Limited	Limited	Limited	Limited	Limited	Limited	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Good	Good	Good	Good
Tetrahydronaphthalene	Poor	Poor	Limited	Limited	Limited	Limited	No info	No info	Poor	Poor	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	No info	No info
Thionyl Chloride	Poor	Poor	Poor	Poor	Limited	Limited	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	No info	No info	Good	Good	Good	Good	No info	No info
Toluene	Limited	Poor	Limited	Limited	Limited	Limited	Limited	Limited	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Good	Good	Good	Good
Trichloroethylene	Poor	Poor	Limited	Limited	Limited	Limited	Limited	Limited	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Good	Good	Good	Good
Turpentine	Limited	Poor	Limited	Limited	Limited	Limited	Limited	Limited	Limited	Limited	Limited	Limited	Limited	Limited	Limited	Limited	Limited	Limited	Limited	Limited	Good	Good	Good	Good	Good	Good
Vegetable Oil	Limited	Limited	Limited	Limited	Good	Good	Limited	Limited	Good	Good	Limited	Limited	Limited	Limited	Limited	Limited	Limited	Limited	Limited	Limited	Good	Good	Good	Good	Good	Good
Xylene	Limited	Poor	Limited	Limited	Limited	Limited	Limited	Limited	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Good	Good	Good	Good