

PA 12 CHEMICAL RESISTANCE CHART

R = Resistant

LR = Limited Resistance

NR = Not Recommended

ND = No Data

Chemical	Resistance		
	20°C	60°C	100°C
Acetaldehyde	R	ND	ND
Acetic acid (10%)	LR	ND	ND
Acetic acid (glac./anh.)	NR	ND	ND
Acetic anhydride	LR	ND	ND
Aceto-acetic ester	NR	ND	ND
Acetone	R	ND	ND
Other ketones	ND	ND	ND
Acetonitrile	ND	ND	ND
Acetylene	ND	ND	ND
Acetyl salicylic acid	ND	ND	ND
Acid fumes	ND	ND	ND
Alcohols	LR	ND	ND
Aliphatic esters	LR	ND	ND
Alkyl chlorides	ND	ND	ND
Alum	R	ND	ND
Aluminium chloride	R	ND	ND
Aluminium sulphate	R	ND	ND
Ammonia, anhydrous	R	ND	ND
Ammonia, aqueous	R	ND	ND
Ammonium chloride	R	ND	ND
Amyl acetate	LR	ND	ND
Aniline	LR	ND	ND
Antimony trichloride	NR	ND	ND

Aqua regia	NR	ND	ND
Aromatic solvents	R	ND	ND
Ascorbic acid	ND	ND	ND
Beer	R	ND	ND
Benzaldehyde	NR	ND	ND
Benzene	R	ND	ND
Benzoic acid	LR	ND	ND
Benzoyl peroxide	ND	ND	ND
Boric acid	ND	ND	ND
Brines, saturated	ND	ND	ND
Bromide (K) solution	R	ND	ND
Bromine	NR	ND	ND
Bromine liquid, tech.	NR	ND	ND
Bromine water, saturated aqueous	NR	ND	ND
Butyl acetate	R	ND	ND
Calcium chloride	R	ND	ND
Carbon disulphide	R	ND	ND
Carbonic acid	ND	ND	ND
Carbon tetrachloride	LR	ND	ND
Caustic soda & potash	R	ND	ND
Cellulose paint	ND	ND	ND
Chlorates of Na, K, Ba	LR	ND	ND
Chlorine, dry	NR	ND	ND
Chlorine, wet	NR	ND	ND
Chlorides of Na, K, Ba	R	ND	ND
Chloroacetic acid	NR	ND	ND
Chlorobenzene	R	ND	ND
Chloroform	R	ND	ND
Chlorosulphonic acid	NR	ND	ND
Chromic acid (80%)	NR	ND	ND

Citric acid	R	ND	ND
Copper salts (most)	R	ND	ND
Cresylic acids (50%)	NR	ND	ND
Cyclohexane	R	ND	ND
Detergents, synthetic	R	ND	ND
Emulsifiers, concentrated	ND	ND	ND
Esters	ND	ND	ND
Ether	R	ND	ND
Fatty acids (>C ₆)	R	ND	ND
Ferric chloride	ND	ND	ND
Ferrous sulphate	ND	ND	ND
Fluorinated refrigerants	R	ND	ND
Fluorine, dry	ND	ND	ND
Flourine, wet	ND	ND	ND
Fluorosilic acid	ND	ND	ND
Formaldehyde (40%)	LR	ND	ND
Formic acid	NR	ND	ND
Fruit juices	R	ND	ND
Gelatine	ND	ND	ND
Glycerine	R	ND	ND
Glycols	R	ND	ND
Glycol, ethylene	LR	ND	ND
Glycolic acid	ND	ND	ND
Hexamethylene diamine	ND	ND	ND
Hexamine	ND	ND	ND
Hydrazine	ND	ND	ND
Hydrobromic acid (50%)	ND	ND	ND
Hydrochloric acid (10%)	ND	ND	ND
Hydrochloric acid (conc.)	ND	ND	ND
Hydrocyanic acid	ND	ND	ND

Hydrofluoric acid (40%)	NR	ND	ND
Hydrofluoric acid (75%)	NR	ND	ND
Hydrogen peroxide (30%)	LR	ND	ND
Hydrogen peroxide (30 - 90%)	ND	ND	ND
Hydrogen sulphide	R	ND	ND
Hypochlorites	ND	ND	ND
Hypochlorites (Na 12-14%)	LR	ND	ND
Iso-butyl-acetate	ND	ND	ND
Lactic acid (90%)	LR	ND	ND
Lead acetate	R	ND	ND
Lead perchlorate	ND	ND	ND
Lime (CaO)	ND	ND	ND
Maleic acid	ND	ND	ND
Manganate, potassium (K)	NR	ND	ND
Meat juices	ND	ND	ND
Mercuric chloride	R	ND	ND
Mercury	R	ND	ND
Methanol	LR	ND	ND
Methylene chloride	R	ND	ND
Milk products	R	ND	ND
Moist air	ND	ND	ND
Molasses	ND	ND	ND
Monoethanolamine	ND	ND	ND
Naptha	ND	ND	ND
Napthalene	R	ND	ND
Nickel salts	R	ND	ND
Nitrates of Na, K and NH ₃	R	ND	ND
Nitric acid (<25%)	NR	ND	ND
Nitric acid (50%)	NR	ND	ND
Nitric acid (90%)	NR	ND	ND

Nitric acid (fuming)	NR	ND	ND
Nitrite (Na)	LR	ND	ND
Nitrobenzene	LR	ND	ND
Oils, diesel	ND	ND	ND
Oils, essential	R	ND	ND
Oils, lubricating + aromatic additives	ND	ND	ND
Oils, mineral	ND	ND	ND
Oils, vegetable and animal	R	ND	ND
Oxalic acid	R	ND	ND
Ozone	R	ND	ND
Paraffin wax	R	ND	ND
Perchloric acid	ND	ND	ND
Petroleum spirits	R	ND	ND
Phenol	NR	ND	ND
Phosphoric acid (20%)	NR	ND	ND
Phosphoric acid (50%)	NR	ND	ND
Phosphoric acid (95%)	NR	ND	ND
Phosphorous chlorides	ND	ND	ND
Phosphorous pentoxide	ND	ND	ND
Phthalic acid	ND	ND	ND
Picric acid	ND	ND	ND
Pyridine	R	ND	ND
Salicyl aldehyde	ND	ND	ND
Sea water	ND	ND	ND
Silicic acid	ND	ND	ND
Silicone fluids	ND	ND	ND
Silver nitrate	R	ND	ND
Sodium carbonate	R	ND	ND
Sodium peroxide	ND	ND	ND
Sodium silicate	ND	ND	ND
Sodium sulphide	R	ND	ND

Stannic chloride	ND	ND	ND
Starch	R	ND	ND
Sugar, syrups & jams	R	ND	ND
Sulphamic acid	ND	ND	ND
Sulphates (Na, K, Mg, Ca)	R	ND	ND
Sulphites	R	ND	ND
Sulphonic acids	ND	ND	ND
Sulphur	R	ND	ND
Sulphur dioxide, dry	R	ND	ND
Sulphur dioxide, wet	NR	ND	ND
Sulphur dioxide (96%)	NR	ND	ND
Sulphur trioxide	NR	ND	ND
Sulphuric acid (<50%)	NR	ND	ND
Sulphuric acid (70%)	NR	ND	ND
Sulphuric acid (95%)	NR	ND	ND
Sulphuric acid, fuming	NR	ND	ND
Sulphur chlorides	ND	ND	ND
Tallow	ND	ND	ND
Tannic acid (10%)	ND	ND	ND
Tartaric acid	R	ND	ND
Trichlorethylene	LR	ND	ND
Urea (30%)	R	ND	ND
Vinegar	R	ND	ND
Water, distilled.	R	ND	ND
Water, soft	R	ND	ND
Water, hard	R	ND	ND
Wetting agents (<5%)	ND	ND	ND
Yeast	ND	ND	ND
Zinc chloride			

These recommendations are based upon information from material suppliers and careful examination of available published information and are believed to be

accurate. However, since the resistance of metals, plastics and elastomers can be affected by concentration, temperature, presence of other chemicals and other factors, this information should be considered as a general guide rather than an unqualified guarantee. Ultimately, the customer must determine the suitability of the hose used in various solutions. All recommendations assume ambient temperatures unless otherwise noted. This chart is merely a guide line, Nylon Tubes & Coils can in no way be held responsible for any damage loss or injury.