

THORPLAS-BLUE CHEMICAL RESISTANCE DATA

The following chemicals are known to attack or be compatible with ThorPlas-Blue. The degree of compatibility is shown by a code letter which indicates at room temperature the effect of the chemical. We must emphasize that this chart should be used as a general guide only.

For more information visit www.ThorDonBearings.com

CW% = Concentration Weight %
TPB = ThorPlas-Blue Compatibility

CHEMICAL	CW%	TPB
Acetaldehyde Aq.	40	A
Acetamide Aq.	50	A
Acetic Acid Aq.	10	A
Acetone		A
Acrylonitrile		B
Alcohols, Aliphatic		A
Allyl Chloride		C
Allyl Alcohol		A
Aluminum Chloride Aq.	10	A
Aluminum Sulphate Aq.	5	A
Ammonia Aq.	10	A
Ammonia Gas		A
Ammonium Carbonate Aq.	10	A
Ammonium Chloride Aq.	10	A
	37	A
Amyl Acetate		A
Amyl Alcohol		A
Aniline		A
Antimony Trichloride Aq.	10	B
Barium Chloride Aq.	10	A
Barium Sulphate Aq.	10	A
Barium Sulphide Aq.	10	A
Benzaldehyde	10	A
Benzene		A
Benzene Sulphonic Acid		A
Benzyl Alcohol		A
Benzoic Acid Aq.	SAq.	A
Beverages Aq. Alcoholic		A
Beverages Aq. Carbonated		A
Bitumen		A
Bleaching Liquid	12.5	A
	100	*
Boric Acid Aq.	10	A
Boron Trifluoride		C
Bromine Aq.	30	C
Bromine Liq.		C
Butanol		A
Butyl Acetate		A
Butyl Phthalate		A
Butylene Glycol		A
Butylamine		A
Butyric Acid Aq.	20	A
Butyric Acid	CAq.	A
Butyrolactone		A
Calcium Chloride Aq.	10	A
Calcium Chloride (in Alcohol)	20	A
Calcium Hypochlorite		B
Camphor		A
Carbon Disulphide		A
Carbon Tetrachloride		A
Carbonic Acid Aq.	10	A
Carnalite Aq.	10	B
Castor Oil		A
Catechol		A
Chloral Hydrate		A
Chlorine Aq.	10	B
Chlorine Gas	100	C
Chloroacetic Acid Aq.	10	C
Chlorobenzene		A
Chloroform		C
Chlorosulphonic Acid Aq.	10	C
Chrome Alum Aq.	10	B
Chromic Acid Aq.	1	A

CHEMICAL	CW%	TPB
Citric Acid Aq.	10	A
	SAq.	A
Coconut Oil		A
Cresols	90	C
Cresote		A
Cresylic Acid		C
Cupric Chloride Aq.	10	A
Cupric Sulphate Aq.	0.5	A
	10	A
	SAq.	A
Cyclohexane		A
Cyclohexanol		A
Cyclohexanone		A
Decalin		B
Detergents, Organic		A
Dibutylphthalate		A
Dichlorodifluoro Methane		A
Dichloroethylene		B
Diesel Oil		A
Diethyl Ether		A
Diethyleneglycol Aq.	90	A
Dimethyl Aniline		B
Dimethyl Carbinol		A
Dimethyl Formamide		B
Dioxane		A
Edible Oils		A
Ethanol, Denatured	96	A
Ethyl Acetate		A
Ethyl Butyrate		A
Ethyl Chloride		B
Ethylene Chloride		C
Ethylene Chlorohydrin	100	C
Ethylene Diamine		C
Ethylene Dichloride	100	C
Ethylene Glycol Aq.	96	A
Ethylene Propionate		A
Ferric Chloride Aq.	5	A
	10	A
	SAq.	B
Ferrous Chloride Aq.	10	A
Fluorine	100	C
Fluosilicic Acid Aq.	30	C
Fluothane		A
Formaldehyde Aq.	30	A
Formic Acid Aq.	5	A
	10	A
Freon 12 (Arcton 12)		A
Furfural	100	A
Gasoline		A
Glycerine		A
Heptane		A
Hexane		A
Hydrobromic Acid Aq.	10	C
Hydrochloric Acid Aq.	20	A
Hydrofluoric Acid Aq.	4	B
Hydrogen Peroxide Aq.	0.5	A
	3	A
	30	A
Hydrogen Sulphide Aq.	10	A
	SAq.	C
Hydrogenated Vegetable Oils		A
Hydroquinone	5	A
Iodine (In Alcohol)		*

CHEMICAL	CW%	TPB
Iodine (In Pt. Iodine) Aq.	3	*
Isooctane		A
Isopropanol		A
Isopropyl Ether		A
Lactic Acid Aq.	10	A
	90	A
Lead Acetate Aq.	10	A
Lead Stearate		A
Linseed Oil		A
Lithium Bromide Aq.	50	A
Lubricating Oils (Petroleum)		A
Magnesium Chloride Aq.	10	A
Magnesium Hydroxide Aq.	10	B
Magnesium Sulphate Aq.	10	A
Maleic Acid Aq.	CAq.	A
Malonic Acid Aq.	CAq.	A
Manganese Sulphate Aq.	10	A
Mercuric Chloride Aq.	6	A
Mercury		A
Methanol		A
Methyl Acetate		A
Methyl Ethyl Ketone		A
Methyl Phenyl Ether		A
Methyl Pyrrolidone		A
Methylene Chloride		C
Mineral Oils		A
Naphthalene		A
Nickel Sulphate Aq.	10	A
Nicotine		A
Nitric Acid Aq.	0.1	A
	10	D
Nitrobenzene		B
Nitromethane		A
Oleic Acid		A
Oxalic Acid Aq.	10	A
Ozone		A
Paraffin		A
Perchloric Acid Aq.	10	A
Perchloroethylene		A
Petroleum Ether		A
Phenol (Molten)		C
Phenol Aq.	6	C
	75	C
Phosphoric Acid Aq.	0.3	A
	3	A
	10	B
Phthalic Acid Aq.	SAq.	A
Phthalic Diocetyl		A
Potassium Acetate Aq.	50	A
Potassium Bicarbonate Aq.	60	A
Potassium Bromide Aq.	10	A
Potassium Carbonate Aq.	60	A
Potassium Chloride Aq.	90	A
Potassium Dichromate Aq.	5	A
Potassium Ferricyanide Aq.	30	A
Potassium Ferrocyanide Aq.	30	A
Potassium Hydroxide Aq.	10	C
	50	C
Potassium Nitrate Aq.	10	A
Potassium Permanganate Aq.	1	A
Potassium Sulphate Aq.	CAq.	A
Potassium Sulphide Aq.	90	A
Propane Gas		A

CHEMICAL	CW%	TPB
Pyridine		A
Resorcinol		B
Salicylic Acid		A
Silicone Fluids		A
Silver Nitrate		A
Soap Solutions		A
Sodium (Molten)		*
Sodium Acetate Aq.	60	A
Sodium Benzoate Aq.	10	A
Sodium Bicarbonate Aq.	50	A
Sodium Bisulphate Aq.	10	A
Sodium Bromide Aq.	10	A
Sodium Carbonate Aq.	20	A
	50	A
Sodium Chlorate Aq.	10	A
Sodium Chloride Aq.	10	A
	90	A
Sodium Cyanide Aq.	10	A
Sodium Hydroxide Aq.	10	C
	50	C
Sodium Hypochlorite 15% Cl (Chlorine Bleach)		A
Sodium Nitrate Aq.	50	A
Sodium Perborate Aq.	10	A
Sodium Phosphate Aq.	10	A
Sodium Silicate	10	A
Sodium Sulphate Aq.	90	A
Sodium Sulphide Aq.	90	A
Sodium Thiosulphate Aq.	10	A
Stannic Chloride Aq.	10	A
Stannic Sulphate Aq.	10	A
Stearic Acid		A
Styrene (Monomer)		B
Sulphur		A
Sulphur Dioxide (Dry Gas)	100	B
Sulphuric Acid Aq.	2	A
	20	A
Sulphuric Acid Conc.	> 80	C
Sulphurous Acid Aq.	10	A
Tallow		B
Tar		A
Tartaric Acid Aq.	10	A
Tetrachlorethylene		B
Tetrahydrofuran		B
Tetralin		A
Thionyl Chloride		C
Thiophene		A
Toluene		A
Transformer Oil		A
Trichlorethylene		B
Triethanolamine		B
Trisodium Phosphate Aq.	95	A
Turpentine		A
Urea		A
Vaseline		A
Vegetable Oils		A
Vinegar		A
Vinyl Chloride		A
Water		A
Wax (Molten)		A
White Spirit		A
Wines & Spirits		A
Xylene		A
Xylenol		A
Zinc Chloride Aq.	10	A
Zinc Oxide		A
Zinc Sulphate Aq.	10	A

Aq. = Aqueous Solution
SAq. = Saturated Aqueous Solution
CAq. = Concentrated Aqueous Solution
* = No data available
Revised: Summer 2018

A - No attack, possibly slight absorption. Negligible effect on mechanical properties
B - Slight attack by absorption. Some swelling & a small reduction in mechanical properties likely.
C - Moderate attack or appreciable absorption. Material will have limited life.
D - Material will decompose or dissolve in a short time
Where aqueous solutions are shown, the concentration as a weight percentage is given.