

DESIGN CONSIDERATIONS

Chemical Resistance Table

TABLE OVERVIEW

This guide to chemical resistance of Alsynite Resin Systems provides information on the resin composition and their compatibility to aggressive environments. Contact the Alsynite Technical Department for further information.

CHEMICALS	ALSYNITE GP Resin Orthophthalic	ALSYNITE CR1 Resin Isophthalic	ALSYNITE CR2 Resin Isophthalic/ Neo Pentyl Glycol	ALSYNITE CR3 Resin Bisphenol	ALSYNITE CR4 Resin Vinyl Ester	ALSYNITE 50FR & 25HTH Resin Fire Retardant
ACIDS						
Sulphuric 10%	B	B	A	A	A	B
50%	E	D	C	A	A	D
Hydrochloric 10%	B	A	A	A	A	A
30%	E	B	B	A	A	B
Phosphoric (Concentrated)	D	C	B	B	A	C
Hydrofluoric 10%	E	E	E	C	B	E
40%	E	E	E	E	E	E
Nitric 10%	D	D	C	B/A	B/A	D
40%	E	E	E	E	E	E
Acetic	C	B/C	A/E	A/C	A/C	B/C
ALKALIS						
Caustic Soda 3%	E	E	C	B	B	D
50%	E	E	E	B	B	E
Hydrated Lime	D	B	A	A	A	B
Calcium Carbonate	C	B	A	A	A	B
Ammonia Hydroxide 10%	D	C	B	A	A	D
(Concentrated)	E	E	D	C	C	E
Sodium Hypochloride 5%	D	C	C	B	A	C
SOLVENTS						
Benzene	E	E	D	D	B	E
Acetone	D	D	D	D	D	D
Ethanol	C	B	B	A	A	B
Methanol	E	E	E	E	E	E
Petrol	D	B	B	B	B	B
Diesel	D	B	B	B	B	B
OTHERS						
Salt Water Solution	A	A	A	A	A	A
Distilled H ₂ O	B	A	A	A	A	A
Sewage	C	A/B	A	A	A	A/B
FERTILIZER						
Super Phosphate	E	D	C/D	B	B	D
Ammonia	E	D	B/C	A/B	A/B	D
PLATING						
Nickel	C	B	B	A	A	B
Silver	C	B	B	A	A	B
Gold	C	B	B	A	A	B
Copper	D	C	C	A	A	C
Chrome	E	D	D	D	B	D

CODING

A = not affected **B** = slightly affected **C** = Significantly affected **D** = severely affected **E** = destroyed

Assumes an ambient temperature of 15° C and constant contact with condensation. Alsynite CR3 and CR4 resins severely yellow and are not suitable for translucent applications.