

BELZONA® PRODUCT DATA Q509

CHEMICAL RESISTANCE OF BELZONA® 4181

INORGANIC ACIDS

	<u>RATING</u>
Carbonic acid	Ex
Chromic acid 10%	Ex
Chromic acid 40%	P
Fluosilicic acid 10%	Ex
Hydrobromic acid 10%	Ex
Hydrobromic acid 40%	Ex
Hydrochloric acid 10%	Ex
Hydrochloric acid 36%	Ex
Hydrofluoric acid 52%	?
Hydrofluorosilicic acid 30%	Ex
Nitric acid 15%	Ex
Nitric acid 30%	Ex

	<u>RATING</u>
Nitric acid 50%	Ex
Nitric acid 70%	P
Nitrous acid 20%	Ex
Oleum 20-65% SO ₃	P
Phosphoric acid 10%	Ex
Phosphoric acid 40%	Ex
Phosphoric acid 85%	Ex
Sulfuric acid 10%	Ex
Sulfuric acid 20%	Ex
Sulfuric acid 50%	Ex
Sulfuric acid 98%	Ex
Sulfuric acid 100%	P
Sulfurous acid 6%	Ex

ORGANIC ACIDS

	<u>RATING</u>
Acetic acid 0-10%	Ex
Acetic acid 10-20%	Ex
Acetic acid 20-50%	Ex*
Acetic acid 50-70%	P
Acetic acid (Glacial)	Ex
Citric acid	Ex
Cresylic acid	?
Formic acid 20%	Ex

	<u>RATING</u>
Lactic acid 0-10%	Ex
Lactic acid 10-85%	Ex
Maleic acid	Ex
Salicylic acid	Ex
Stearic acid (solid)	Ex
Tannic acid	Ex
Tartaric acid	Ex

ALCOHOLS

	<u>RATING</u>
Butanol	Ex
Cellosolve	Ex
Ethanol	Ex
Ethylene glycol	Ex
Glycerol	Ex
Hexanol	Ex

	<u>RATING</u>
Isobutanol	Ex
Methanol	Ex
2-Methoxy ethanol	Ex
Methyl "cellosolve"	Ex
Propylene glycol	Ex

* Post curing essential

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All descriptions are based on the results of long term tests carried out in our laboratories and are believed to be true and accurate. No condition or warranty is given covering the results from the use of our products in any particular case, whether the purpose is disclosed or not and we cannot accept liability if the desired results are not obtained.

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ALKALIS

Ammonia solution 0-10%
 Ammonia solution 10-25%
 Calcium hydroxide
 Lime

RATING

Ex
 Ex
 Ex
 Ex

Potassium hydroxide 10%
 Potassium hydroxide 20%
 Sodium hydroxide 10%
 Sodium hydroxide 40%

RATING

Ex
 Ex
 Ex
 Ex

AMINES & AMIDES

Aniline
 Dibutylamine
 Diethanolamine
 Dimethylamine
 Diethylenetriame
 Dimethylformamide

RATING

Ex
 G
 Ex
 F
 F
 P

Hydrazine
 Methylamine 40% aqueous
 Methylamine gas
 Pyridine
 Triethanolamine
 Triethylenetetramine

RATING

Ex
 Ex
 Ex
 P
 Ex
 Ex

ESTERS & ETHERS

Amyl acetate
 Butyl acetate
 Butyl ether
 Dibutyl phthalate
 Dibutyl sebacate
 Diethylether
 Dioctyl adipate

RATING

Ex
 Ex
 Ex
 Ex
 Ex
 Ex
 Ex

Dioctyl phthalate
 Dioctyl sebacate
 Ethyl acetate
 Methyl acetate
 Propylene glycol monomethyl
 Ether acetate
 Tributyl phosphate

RATING

Ex
 Ex
 Ex
 Ex
 Ex
 EX
 Ex

HALOCARBONS

Carbon tetrachloride
 Chlorobenzene
 Chloroform
 Ethylene dichloride

RATING

Ex
 Ex
 Ex
 Ex

Methylene chloride
 Perchlorethylene
 1, 1, 1, - Trichloroethane
 Trichlorotrifluoroethane

RATING

Ex
 Ex
 Ex
 Ex

HYDROCARBONS

Benzene
 Cyclohexane
 Ethane
 Gasoline
 Heptane
 Hexane
 Iso-octane
 Kerosene
 Mineral spirits

RATING

Ex
 Ex
 Ex
 Ex
 Ex
 Ex
 Ex
 Ex

Naphtha
 Paraffin
 Petroleum naphtha
 Stoddard solvent
 Styrene
 Toluene
 Turpentine
 White spirit
 Xylene

RATING

Ex
 Ex
 Ex
 Ex
 Ex
 Ex
 Ex
 Ex

KETONES

Acetone
 Formaldehyde 37%

RATING

Ex*
 Ex

Methyl amyl ketone
 Methyl ethyl ketone

RATING

Ex
 Ex

*** Post curing essential**

MISCELLANEOUS

Bleach
 Brake Fluid
 Bromine water (saturated)
 Carbon disulfide
 Chlorine water (saturated)
 Dimethylsulfoxide
 Emulsion paint
 Ethylethoxypropionate
 Fertilizer solutions
 Grease
 Hydrogen peroxide 35%
 Ink (water based)
 Isothiazolinone
 Mesitylene
 N-Methyl pyrrolidone

RATING

Ex*
 Ex
 Ex
 Ex
 Ex
 Ex
 Ex
 Ex
 Ex
 Ex
 Ex
 Ex
 Ex
 Ex

Napthalene
 Pyrrole
 Resins & rosins (natural)
 Roof pitch
 Rubber latex emulsions
 Sewage
 Skydrol
 Starch
 Tar
 Tetraethyllead
 Tetrahydrofuran
 Urea
 Water, fresh
 Water, sea
 Water, distilled

RATING

Ex
 Ex
 Ex
 Ex
 Ex
 Ex
 Ex
 Ex
 Ex
 ?
 Ex
 Ex
 Ex
 Ex

OILS - MINERAL

Castor oil
 Coconut oil
 Cod liver oil
 Corn oil
 Diesel oil
 Hydraulic oil
 Lubricating oil

RATING

Ex
 Ex
 Ex
 Ex
 Ex
 Ex
 Ex

Oil, petroleum
 Oil/water mixtures
 Silicone oil
 Soybean oil
 Transfer oil
 Tung oil

RATING

Ex
 Ex
 Ex
 Ex
 Ex
 Ex

SALTS

Alum
 Aluminium chloride
 Aluminium sulphate
 Ammonium bicarbonate
 Ammonium fluosilicate
 Ammonium nitrate
 Ammonium phosphate
 Ammonium sulfate
 Barium carbonate
 Barium chloride
 Barium sulphate
 Barium sulfide
 Brines
 Bromine chloride
 Calcium cabonate
 Calcium chloride
 Calcium fluoride
 Calcium hypochlorite
 Calcium sulfate

RATING

Ex
 Ex
 Ex
 Ex
 Ex
 Ex
 Ex
 Ex
 Ex
 Ex
 Ex
 Ex
 Ex
 Ex
 Ex
 Ex

Potassium chloride
 Potassium cyanide
 Potassium dichromate
 Potassium diphosphate
 Potassium ferricyanide
 Potassium ferrocyanide
 Potassium iodide
 Potassium nitrate
 Potassium permanganate
 Potassium sulfate
 Potassium sulfide
 Potassium sulfite
 Quaternary smmonium salts
 Silver nitrate
 Sodium acetate
 Sodium aluminate
 Sodium bicarbonate
 Sodium bisulfate
 Sodium bisulfite

RATING

Ex
 Ex
 Ex
 Ex
 Ex
 Ex
 Ex
 Ex
 Ex
 Ex
 Ex
 Ex
 Ex
 Ex
 Ex
 Ex

*** Post curing essential**

Chromium potassium	Ex	Sodium borate	Ex
Copper acetate	Ex	Sodium bromide	Ex
Copper chloride	Ex	Sodium carbonate	Ex
Copper nitrate	Ex	Sodium chlorate	Ex
Copper sulfate	Ex	Sodium chloride	Ex
Epsom salts	Ex	Sodium chromate	Ex
Ferric chloride	Ex	Sodium cyanide	Ex
Ferric nitrate	Ex	Sodium fluoride	Ex
Ferric sulfate	Ex	Sodium fluorosilicate	Ex
Ferrous chloride	Ex	Sodium hypochlorite 15%	Ex
Ferrous sulfate	Ex	Sodium metaphosphate	Ex
Magnesium bisulfate	Ex	Sodium metasilicate	Ex
Magnesium carbonate	Ex	Sodium nitrate	Ex
Magnesium chloride	Ex	Sodium phosphate (dibasic)	Ex
Magnesium sulfate	Ex	Sodium phosphate (tribasic)	Ex
Mercuric chloride	Ex	Sodium silicate	Ex
Mercuric cyanide	Ex	Sodium sulfate	Ex
Nickel ammonium sulfate	Ex	Sodium sulfide	Ex
Nickel chloride	Ex	Stannic chloride	Ex
Nickel nitrate	Ex	Stannous chloride	Ex
Nickel sulfate	Ex	Zinc chloride	Ex
Potassium bisulfite	Ex	Zinc hydrosulfite	Ex
Potassium bromide	Ex	Zinc sulfate	Ex
Potassium carbonate	Ex		
Potassium chlorate	Ex		

These tables are based upon immersion under static conditions at 68°F (20°C).

They should only be considered as a guide to the performance which might be expected under practical conditions.

In these tables, the following nomenclature has been used:-

- (Ex) Excellent - Suitable for all reasonable applications involving immersion for short periods.
- (P) Poor - Not suitable for any applications involving contact with the chemical itself or fumes evolved from it.

BELZONA® PRODUCT DATA Q509

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