
BELZONA® PRODUCT DATA Q507

CHEMICAL RESISTANCE OF BELZONA® 4411 (Granogrip)

INORGANIC ACIDS

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

	<u>RATING</u>
Nitric acid 65%	P
Nitrous acid 20%	Ex
Oleum 20-65% SO ₃	Ex
Perchloric acid 60%	P
Phosphoric acid 10%	F
Phosphoric acid 30%	F
Phosphoric acid 85%	P
Sulfuric acid 10%	Ex
Sulfuric acid 20%	Ex
Sulfuric acid 50%	G
Sulfuric acid 98%	P
Sulfuric acid 100%	P
Sulfurous acid 6%	G

ORGANIC ACIDS

	<u>RATING</u>
Acetic acid 0-10%	F
Acetic acid 10-20%	F
Acetic acid 20-50%	P
Acrylic acid	P
Chlorosulphonic acid	P
Citric acid	G
Cresylic acid	P
Formic acid 20%	P

	<u>RATING</u>
Lactic acid 0-10%	F
Lactic acid 10-85%	P
Maleic acid	Ex
Phenol 80%	P
Salicylic acid	Ex
Stearic acid (solid)	Ex
Tannic acid	G
Tartaric acid	G

ALCOHOLS

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

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

Q507 - 1 (Issue 3)

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 10-30%
 Calcium hydroxide
 Lime

RATING

G
 F
 Ex
 Ex

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

RATING

G
 G
 G
 G

AMINES & AMIDES

Aniline
 Dibutylamine
 Diethanolamine
 Dimethylamine
 Diethylenetriamine
 Dimethylformamide

RATING

P
 P
 Ex
 P
 P
 P

Hydrazine
 Methylamine 40% aqueous
 Methylamine gas
 Pyridine
 Triethanolamine
 Triethylenetetramine

RATING

P
 F
 G
 P
 G
 P

BEVERAGES & FOODSTUFFS

Apple juice
 Beer
 Beet sugar
 Butter
 Buttermilk
 Cider
 Citric juice
 Fermentation liquor
 Glucose
 Ketchup
 Margarine

RATING

Ex
 G
 Ex
 F
 G
 Ex
 Ex
 G
 Ex
 Ex
 Ex

Mayonnaise
 Milk
 Molasses
 Mustard
 Salad oil
 Sugar liquids
 Tomato juice
 Vinegar
 Whiskey and wine
 Yeast

RATING

Ex
 G
 Ex
 Ex
 Ex
 Ex
 Ex
 F
 G
 Ex

ESTERS & ETHERS

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

RATING

P
 P
 Ex
 Ex
 Ex
 G
 Ex

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

RATING

Ex
 Ex
 P
 P
 F
 Ex

GASES

Butane
 Carbon dioxide
 Carbon monoxide
 Chlorine gas
 Hydrogen gas
 Hydrogen sulfide

RATING

Ex
 Ex
 Ex
 G
 Ex
 Ex

Methane
 Natural gas
 Nitrous oxide
 Ozone (aqueous solution)
 Sulfur dioxide
 Sulphur trioxide

RATING

Ex
 Ex
 Ex
 P
 Ex
 Ex

HALOCARBONS

Carbon tetrachloride
Chlorobenzene
Chloroform
Ethylene dichloride
Methylene chloride

RATING

G
P
P
P
P

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

RATING

F
F
F
F

HYDROCARBONS

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

RATING

F
G
Ex
Ex
Ex
Ex
Ex
Ex
G

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

RATING

G
Ex
G
G
F
F
G
G
F

KETONES

Acetone
Formaldehyde 37%

RATING

P
G

Methyl amyl ketone
Methyl ethyl ketone

RATING

F
P

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

F
G
Ex
P
G
P
Ex
F
Ex
Ex
F
Ex
Ex
F
P

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

RATING

G
P
Ex
Ex
Ex
Ex
G
Ex
Ex
P
F
G
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
G
Ex
Ex

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

RATING

G
Ex
Ex
Ex
Ex
Ex

These tables are based upon immersion tests carried out 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 including immersion |
| (G) Good | - Suitable for applications involving immersion for short periods, splashing and contact with fumes. |
| (F) Fair | - Suitable for use in environments contaminated by the chemical or in situations where accidental splashing can be removed either by cleaning or, in the case of volatile solvents, by evaporation. |
| (P) Poor | - Not suitable for any applications involving contact with the chemical itself or fumes evolved from it. |

BELZONA® PRODUCT DATA Q507

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