

CHEMICAL RESISTANCE OF BELZONA® 5892

FN10193



				Chemical Resistance			
	Chemical name (Synonym)	Chemical formula (CAS number)	Concentration	20 °C 68 °F	60 °C 140 °F	90 °C 194 °F	Other
Inorganic Acids	Hydrochloric acid	HCl (7647-01-0)	10%	G*	M	M	-
			5%	G*	M	M	-
			1%	Ex*	G	M	-
	Phosphoric acid (orthophosphoric acid)	H ₃ PO ₄ (7664-38-2)	5%	M*	M	P	-
			Sulphuric acid	H ₂ SO ₄ (7664-93-9)	10%	M*	P
	5%	M*			M	P	-
1%	Ex*	M			M	-	
Organic Acids	Acetic acid (ethanoic acid)	CH ₃ COOH (64-19-7)	5%	P*	P	P	-
			1%	M*	M	M	-
	Phenol (hydroxybenzene)	C ₆ H ₅ OH (108-95-2)	80%	P*	P	P	-
Alcohols, Aldehydes and Ketones	Acetone (propanone)	(CH ₃) ₂ CO (67-64-1)	-	M*	-	-	-
	Amyl alcohol	C ₅ H ₁₁ OH (71-41-0)	-	Ex*	G	G	-
	n-Butanol (butyl alcohol)	C ₄ H ₉ OH (71-36-3)	-	Ex*	G	G	-
	Ethanol (ethyl alcohol)	CH ₃ CH ₂ OH (64-17-5)	-	Ex*	G	-	78 °C 172 °F M
	Ethylene glycol (ethan-1,2-diol, monoethylene glycol, MEG)	(CH ₂ OH) ₂ (107-21-1)	-	Ex*	Ex	Ex	-
	Glycerol (glycerine, propane-1,2,3-triol)	HOCH ₂ CH(OH)CH ₂ OH (56-81-5)	-	Ex*	G	G	-
	n-Hexanol (hexyl alcohol)	C ₆ H ₁₃ OH (111-27-3)	-	Ex*	G	G	-

Excellent	Ex	no significant deterioration / barrier properties retained for greater than 52 weeks <i>suitable for all applications including long term immersion</i>
Good	G	no significant deterioration / barrier properties retained for 12 - 52 weeks <i>suitable for short-term immersion and general chemical contact</i>
Moderate	M	no significant deterioration / barrier properties retained for 1 - 12 weeks <i>suitable for applications involving short term chemical contact e.g. spillage, splashing or secondary containment</i>
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Alcohols, Aldehydes and Ketones	Higher alcohols	$C_nH_{(2n+1)}OH$ where $n > 2$	-	Ex*	G	G	-
	Isopropyl alcohol (IPA) (isopropanol, propan-2-ol)	$CH_3CH(OH)CH_3$ (67-63-0)	-	Ex*	G	-	-
	Isobutyl alcohol (IBA) (isobutanol, 2-methylpropan-1-ol)	$(CH_3)_2CHCH_2OH$ (78-83-1)	-	Ex*	G	G	-
	Methanol (methyl alcohol)	CH_3OH (67-56-1)	-	Ex*	M	-	65°C 149°F M
	Methyl ethyl ketone (MEK) (2-butanone, methyl acetone)	$CH_3C(O)CH_2CH_3$ (78-93-3)	-	Ex*	M	-	-
	Methyl isobutyl ketone (MIBK) (hexone, 4-Methylpentan-2-one)	$(CH_3)_2CHCH_2C(O)CH_3$ (108-10-1)	-	Ex*	Ex*	M	-
	Methyl pentyl ketone (methyl n-amyl ketone, heptan-2-one)	$CH_3COCH_2CH_2CH_2CH_2CH_3$ (110-43-0)	-	Ex*	Ex	G	-
	Propan-1-ol (Propyl alcohol)	$CH_3CH_2CH_2OH$ (71-23-8)	-	Ex*	G	G	-
	Propylene glycol (1,2-Propanediol)	$CH_3CH(OH)CH_2OH$ (57-55-6)	-	Ex*	Ex	Ex	-
	Secondary alcohols	R_1R_2CHOH	-	Ex*	G	G	-
	Tertiary alcohols	$R_1R_2R_3COH$	-	Ex*	G	G	-
	Triethylene glycol (triglycol)	$HOCH_2CH_2OCH_2CH_2OCH_2CH_2O$ H (112-27-6)	-	Ex*	G	M	-
	Tetraethylene glycol (tetraglycol)	$HOCH_2CH_2OCH_2CH_2OCH_2CH_2OCH_2CH_2OH$ (112-60-7)	-	Ex*	G	M	-

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Alkalis / Bases	Ammonia solution (ammonium hydroxide)	NH ₃ (aq) (1336-21-6)	25%	Ex*	-	-	-
	Potassium hydroxide (caustic potash)	KOH 1310-58-3	10%	Ex*	G	M	-
	Sodium hydroxide (caustic soda)	NaOH (1310-73-2)	50%	Ex*	G	Ex	-
20%			Ex*	G	G	-	
10%			Ex*	G	G	-	
Amines & Amides	Diethanolamine (DEA) (2,2'-iminodiethanol)	HN(CH ₂ CH ₂ OH) ₂ (111-42-2)	-	Ex*	Ex	Ex	-
	Diethylene glycolamine (DGA) (2-(2-aminoethoxy) ethanol)	H ₂ NCH ₂ CH ₂ OCH ₂ CH ₂ OH (929-06-6)	-	M*	P	P	-
	N-Methyl diethanolamine (MDEA)	CH ₃ N(CH ₂ CH ₂ OH) ₂ (105-59-9)	-	Ex*	Ex	Ex	-
	Monoethanolamine (MEA) (2-aminoethanol)	H ₂ NCH ₂ CH ₂ OH (141-43-5)	-	M*	P	P	-
	Sulfinol solution (50% diisopropanolamine, 25% tetramethylene sulphone, 25% water)	N/A	-	Ex*	G	M	-
	Triethanolamine (TEA) (2,2',2''-nitrilotriethanol)	N(CH ₂ CH ₂ OH) ₃ (102-71-6)	-	Ex*	Ex	G	-
Gases	Butane	CH ₃ CH ₂ CH ₂ CH ₃ (106-97-8)	-	Ex	Ex	Ex	-
	Carbon dioxide	CO ₂ (124-38-9)	-	Ex	Ex	Ex	-
	Carbon monoxide	CO (630-08-0)	-	Ex	Ex	Ex	-
	Chlorine (dry)	Cl ₂ (7782-50-5)	-	Ex	Ex	Ex	-

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Gases	Ethane	C ₂ H ₆ (74-84-0)	-	Ex	Ex	Ex	-
	Hydrogen	H ₂ (1333-74-0)	-	Ex	Ex	Ex	-
	Hydrogen sulphide	H ₂ S (7783-06-4)	-	Ex	Ex	Ex	-
	Methane (natural gas)	CH ₄ (74-82-8)	-	Ex	Ex	Ex	-
	Nitrogen	N ₂ (7727-37-9)	-	Ex	Ex	Ex	-
	Nitrous oxide (dinitrogen monoxide)	N ₂ O (10024-97-2)	-	Ex	Ex	Ex	-
	Ozone (dry)	O ₃ (10028-15-6)	-	Ex	Ex	Ex	-
	Ozone (wet)	O ₃ (10028-15-6)	-	G*	M	M	-
	Sulphur dioxide	SO ₂ (7446-09-5)	-	Ex	Ex	Ex	-
	Sulphur trioxide (sulphuric anhydride)	SO ₃ (7446-11-9)	-	Ex	Ex	Ex	-
Hydrocarbons	Aviation fuel (AVCAT, AVGAS, AVTAG, AVTUR)	N/A	-	Ex*	Ex	Ex	-
	Crude Oil	N/A	-	Ex*	Ex	Ex	-
	Cyclohexane	C ₆ H ₁₂ (110-82-7)	-	Ex*	Ex	-	-
	Diesel	N/A	-	Ex	Ex	Ex	-

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Hydrocarbons	Ethyl benzene (ethyl benzol, EB)	$C_6H_5CH_2CH_3$ (100-41-4)	-	Ex*	Ex	G	-
	Gasoline (without Ethanol) (petrol)	N/A (8032-32-4)	-	Ex*	Ex	Ex	-
	Heptane	$CH_3CH_2CH_2CH_2CH_2CH_2CH_3$ (142-82-7)	-	Ex*	Ex	Ex	-
	Hexane	$CH_3CH_2CH_2CH_2CH_2CH_3$ (110-54-3)	-	Ex*	Ex	-	-
	Iso-octane (2,2,4-trimethylpentane)	$(CH_3)_3CCH_2CH(CH_3)_2$ (540-84-1)	-	Ex*	Ex	Ex	-
	Kerosene	N/A (8008-20-6)	-	Ex*	Ex	Ex	-
	Mesitylene (1,3,5-Trimethylbenzene)	$C_6H_3(CH_3)_3$ (108-67-8)	-	Ex*	Ex	Ex	-
	Mineral spirits / White spirits (Stoddard solvent)	N/A (8052-41-3)	-	Ex*	Ex	Ex	-
	Naphtha	N/A (8030-30-6)	-	Ex*	Ex	Ex	-
	Naphthalene (naphthalin, white tar)	$C_{10}H_8$ (91-20-3)	-	Ex*	Ex	Ex	-

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Hydrocarbons	Paraffin	N/A (8002-74-2)	-	Ex*	Ex	Ex	-
	Pentane	CH ₃ CH ₂ CH ₂ CH ₂ CH ₃ (109-66-0)	-	Ex*	-	-	-
	Toluene (methylbenzene, phenylmethane, toluol)	C ₆ H ₅ CH ₃ (108-88-3)	-	Ex*	Ex	G	-
	Xylene (dimethyl benzene, xylol)	C ₆ H ₄ (CH ₃) ₂ (95-47-6/108-38-3/106-42-3/1330-20-7)	-	Ex*	Ex	G	-

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