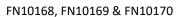




	Chemical name	Chemical formula Concentrati		20 °C 68 °F			90°C 194°F
	Chemical name	(CAS number)	Concentration	Belzona 1981	Belzona 1982	Belzona 1983	Belzona 1983
		116	37%	Ex	G*	Ex*	Belzona 1983
	Hydrochloric acid	HCI (7647-01-0)	20%	Ex	Ex	Ex*	M*
		(7047-01-0)	10%	Ex	Ex	Ex*	G*
			50%	Р	P*	M*	P*
	Nitric acid	HNO ₃ (7697-37-2)	20%	M	G*	Ex*	P*
		(7097-37-2)	10%	Ex	Ex	Ex*	P*
ids			30%	Ex	G*	Ex*	P*
ic Ac			20%	Ex	Ex*	Ex*	P*
Inorganic Acids	Phosphoric acid (orthophosphoric acid)	H ₃ PO ₄ (7664-38-2)	10%	Ex	Ex*	M*	M*
luc	, , ,	(7004-38-2)	5%	Ex	Ex*	Ex*	M*
			2%	Ex Ex Ex* P* Ex G* Ex* P* Ex Ex* Ex* P* Ex Ex* M* M* Ex Ex* Ex* M* G G* Ex* P* Ex Ex Ex* M* Ex Ex Ex* G* Ex Ex Ex* G* Ex Ex Ex* P* P P* M* P*			
			90%	G	G*	Ex*	P*
			70%	Ex	Ex	Ex*	P*
	Sulphuric acid	H ₂ SO ₄	40%	Ex	Ex	Ex*	M*
		(7664-93-9)	20%	Ex	Ex	Ex*	G*
			10%	Ex	Ex	Ex*	P*
			50%	Р	P*	M*	P*
sp			10%	Р	M*	G*	P*
c Aci	Acetic acid	CH₃COOH	5%	G	M	Ex*	M*
Organic Acids	(ethanoic acid)	(64-19-7)	2%	G	M	Ex*	G*
Ō			1%	G	G	Ex*	G
			0.1%	Ex	Ex	Ex*	G
des and	Acetone (propanone)	(CH ₃) ₂ CO	-	G	Ех	Ex*	-
Alcohols, Aldehydes and Ketones	n-Butanol (butyl alcohol)	C ₄ H ₉ OH (71-36-3)	-	Ex	Ex	Ex*	Ex*
Alcohol	Ethanol (ethyl alcohol)	CH₃CH₂OH (64-17-5)	-	Ex	Ех	Ex*	-

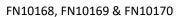
no significant deterioration / barrier properties retained for greater than 52 weeks		no significant deterioration / barrier properties retained for greater than 52 weeks suitable for all applications including long term immersion
Good G no significant deterioration / barrier properties retained for 12 - 52 weeks suitable for short-term immersion and general chemical contact		no significant deterioration / barrier properties retained for 12 - 52 weeks
Moderate	Moderate M no significant deterioration / barrier properties retained for 1 - 12 weeks suitable for applications involving short term chemical contact e.g. spillage, splashing or secondary containment	
Poor P significant deterioration / loss of barrier properties after 1 week or less not suitable for any application		
*		Product must be post cured to deliver quoted chemical resistance
Ex		Bold text highlights real life data obtained via chemical resistance testing
Ex		Normal font indicates that the resistance has been predicted based upon partial test data and/or similar reagents





	Chemical name	Chemical formula	Concentration	20 °C 68 °F			90°C 194°F
	Chemical name	(CAS number)		Belzona 1981	Belzona 1982	Belzona 1983	Belzona 1983
	Ethylene glycol (ethan-1,2-diol, monoethylene glycol, MEG)	(CH ₂ OH) ₂ (107-21-1)	-	Ex	Ех	Ex*	Ex*
	Glycerol (glycerine, propane-1,2,3-triol)	HOCH ₂ CH(OH)CH ₂ OH (56-81-5)	-	Ex	Ex	Ex*	Ex*
	n-Hexanol (hexyl alcohol)	C ₆ H ₁₃ OH (111-27-3)	-	Ex	Ex	Ex*	Ex*
nued	Isopropyl alcohol (IPA) (isopropanol, propan-2-ol)	CH ₃ CH(OH)CH ₃	-	Ex	Ех	Ex*	-
nes conti	Isobutyl alcohol (IBA) (isobutanol, 2-methylpropan-1-ol)	(CH ₃) ₂ CHCH ₂ OH (78-83-1)	-	Ex	Ex	Ex*	Ex*
Alcohols, Aldehydes and Ketones continued	Methanol (methyl alcohol)	CH ₃ OH (67-56-1)	-	G	G	Ex*	-
ldehydes	Methanol solution (aqueous)	CH ₃ OH _(aq) (67-56-1)	55%	G	G	Ex*	Ex*
cohols, A	Methyl ethyl ketone (MEK) (2-butanone, methyl acetone)	CH ₃ C(O)CH ₂ CH ₃ (78-93-3)	-	Ех	Ех	Ex*	-
Ak	Propan-1-ol (Propyl alcohol)	CH ₃ CH ₂ CH ₂ OH (71-23-8)	-	Ex	Ex	Ex*	Ex*
	Propylene glycol (1,2-Propanediol)	CH ₃ CH(OH)CH ₂ OH (57-55-6)	-	Ех	Ех	Ex*	Ex*
	Triethylene glycol (triglycol)	HOCH ₂ CH ₂ OCH ₂ CH ₂ OCH ₂ CH ₂ OH (112-27-6)	-	Ex	Ex	Ex*	Ex*
	Tetraethylene glycol (112-27-6) (tetraglycol) (112-60-7)			Ex	Ex	Ex*	Ex*
Alkalis / Bases	Barium hydroxide	Ba(OH) ₂ (17194-00-2)	-	Ex	Ex	Ex*	Ex*
4	Calcium hydroxide (lime water)	Ca(OH) ₂ (1305-62-0)	-	Ex	Ex	Ex*	Ex*

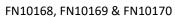
Excellent	Ex	no significant deterioration / barrier properties retained for greater than 52 weeks
LACEIIEIIC	LX	suitable for all applications including long term immersion
Good	G	no significant deterioration / barrier properties retained for 12 - 52 weeks
dood	9	suitable for short-term immersion and general chemical contact
Moderate	М	no significant deterioration / barrier properties retained for 1 - 12 weeks
Moderate	IVI	suitable for applications involving short term chemical contact e.g. spillage, splashing or secondary containment
Poor	D	significant deterioration / loss of barrier properties after 1 week or less
POOT	P	not suitable for any application
*		Product must be post cured to deliver quoted chemical resistance
		Troduct mast ac post carea to deliver quoted shermed resistance
Ex		Bold text highlights real life data obtained via chemical resistance testing
- LA		The section of the se
Ex		Normal font indicates that the resistance has been predicted based upon partial test data and/or similar reagents
		nonnel continue de la





	Chemical name	Chemical formula	Concentration		20 °C 68 °F		90°C 194°F
	Chemical name	(CAS number)	Concentration	Belzona 1981	Belzona 1982	Belzona 1983	Belzona 1983
Alkalis / Bases continued	Magnesium hydroxide (milk of magnesia)	Mg(OH) ₂ (1309-42-8)	-	Ex	Ex	Ex*	Ex*
	Potassium hydroxide (caustic potash)	KOH (1310-58-3)	40%	Ex	Ex	Ex*	Ex*
Base			50%	Ex	Ex	Ex*	Ex*
alis /	Sodium hydroxide	NaOH	40%	Ex	Ex	Ex*	Ex*
AK	(caustic soda)	(1310-73-2)	20%	Ex	Ex	Ex*	Ex*
			10%	Ex	Ex	Ex*	Ex*
	Diethanolamine (DEA) (2,2'-iminodiethanol)	HN(CH ₂ CH ₂ OH) ₂ (111-42-2)	-	Ex	Ex	Ex*	Ex*
	Diethylamine (1-ethylaminoethane)	CH ₃ CH ₂ NHCH ₂ CH ₃ (109-89-7)		P	M*	M*	Р*
	Diethylene glycolamine (DGA) (2-(2-aminoethoxy) ethanol)	H ₂ NCH ₂ CH ₂ OCH ₂ CH ₂ OH (929-06-6)	-	Ех	Ex	Ex*	M*
Amides	N-Methyl diethanolamine (MDEA)	CH ₃ N(CH ₂ CH ₂ OH) ₂ (105-59-9)	-	Ex	Ex	Ex*	Ex*
Amines & Amides	N-Methylethanolamine (2-methylaminoethanol)	CH ₃ NHCH ₂ CH ₂ OH (109-83-1)	-	Ex	Ex	Ex*	Ex*
▼	Monoethanolamine (MEA) (2-aminoethanol)	H ₂ NCH ₂ CH ₂ OH (141-43-5)	-	Ex	Ех	Ex*	M*
	Sulfinol solution (50% diisopropanolamine, 25% tetramethylene sulphone, 25% water)	N/A	-	Ex	Ех	Ex*	Ex*
	Triethanolamine (TEA) (2,2',2"-nitrilotriethanol)	N(CH ₂ CH ₂ OH) ₃ (102-71-6)	-	Ex	Ex	Ex*	Ex*
hers	Butyl acetate (butyl ethanoate)	CH ₃ C(O)OCH ₂ CH ₂ CH ₂ CH ₃ (123-86-4)	-	Ех	Ех	Ex*	Ex*
Esters and Ethers	Diethyl ether (ether, ethoxyethane)	CH ₃ CH ₂ OCH ₂ CH ₃ (60-29-7)	-	Ех	Ех	Ex*	-
Este	Ethyl acetate (ethyl ethanoate, acetic ester)	CH ₃ C(O)OCH ₂ CH ₃ (141-78-6)	-	Ех	Ех	Ex*	-

Excellent	Ex	no significant deterioration / barrier properties retained for greater than 52 weeks
LACEHEIIC	LA	suitable for all applications including long term immersion
Good	G	no significant deterioration / barrier properties retained for 12 - 52 weeks
dood	ס	suitable for short-term immersion and general chemical contact
Moderate	М	no significant deterioration / barrier properties retained for 1 - 12 weeks
suitable for applications involving short term chemical contact e.g. spillage, splashing or secondary containment		suitable for applications involving short term chemical contact e.g. spillage, splashing or secondary containment
Poor	D	significant deterioration / loss of barrier properties after 1 week or less
Poor	P	not suitable for any application
*		Product must be post cured to deliver quoted chemical resistance
Ex		Bold text highlights real life data obtained via chemical resistance testing
Ex		Normal font indicates that the resistance has been predicted based upon partial test data and/or similar reagents





	Chemical name	Chemical formula	Concentration		20 °C 68 °F		90°C 194°F
	Chemical name	(CAS number)	Concentration	Belzona 1981	Belzona 1982	Belzona 1983	Belzona 1983
	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*	Ex*
Gases	Ethane	C ₂ H ₆ (74-84-0)	-	Ex	Ex	Ex*	-
Ğa	Hydrogen sulphide	H ₂ S (7783-06-4)	-	Ex	Ex	Ex*	:x* -
	Methane (natural gas)	CH ₄ (74-82-8)	-	Ex	Ex	Ex*	-
	Nitrogen	N ₂ (7727-37-9)	-	Ex	Ex	Ex*	Ex*
Halocarbons	Chlorobenzene (benzene chloride, phenyl chloride)	C ₆ H ₅ Cl (108-90-7)	-	Ex Ex Ex*		Ex*	P*
Haloca	Dichloromethane (DCM) (methylene chloride)	CH ₂ Cl ₂ (75-09-2)	-	Р	M*	Р*	-
	Aviation fuel (AVCAT, AVGAS, AVTAG, AVTUR)	N/A	1	Ex	Ex	Ex*	Ex*
	Benzene (benzol)	C ₆ H ₆ (71-43-2)	-	Ex	Ex	Ex*	-
Hydrocarbons	Crude Oil	N/A	-	Ех	Ех	Ex*	Ex*
Hydro	Cyclohexane	C ₆ H ₁₂ (110-82-7)	-	Ex	Ex	Ex*	-
	Gasoline (without Ethanol) (petrol)	N/A (8032-32-4)	-	Ех	Ex	Ex*	Ex*
	Heptane	CH ₃ CH ₂ CH ₂ CH ₂ CH ₂ CH ₂ CH ₃ (142-82-7)	-	Ех	Ex	Ex*	Ex*

Excellent	Ex	no significant deterioration / barrier properties retained for greater than 52 weeks
Excellent	EX	suitable for all applications including long term immersion
Good	G	no significant deterioration / barrier properties retained for 12 - 52 weeks
Good	פ	suitable for short-term immersion and general chemical contact
Moderate	М	no significant deterioration / barrier properties retained for 1 - 12 weeks
suitable for applications involving short term chemical contact e.g. spillage, splashing or secondary containment		suitable for applications involving short term chemical contact e.g. spillage, splashing or secondary containment
Door	D	significant deterioration / loss of barrier properties after 1 week or less
Poor	P	not suitable for any application
*		Product must be post cured to deliver quoted chemical resistance
		Troduct must be post cured to deliver quoted difernical resistance
Ex		Bold text highlights real life data obtained via chemical resistance testing
LA		Sold text inglinging real included obtained the crieffical residence testing
Ex		Normal font indicates that the resistance has been predicted based upon partial test data and/or similar reagents
LX		normal forte indicates that the resistance has been predicted based upon partial test data and/or similar reagents

FN10168, FN10169 & FN10170



	Chemical name	Chemical formula	Concentration	20 °C 68 °F			90°C 194°F
	Chemical name	(CAS number)	concentration	Belzona 1981	Belzona 1982	Belzona 1983	Belzona 1983
	Hexane	CH ₃ CH ₂ CH ₂ CH ₂ CH ₂ CH ₃ (110-54-3)	-	Ex	Ex	Ex*	-
	lso-octane (2,2,4-trimethylpentane)	(CH ₃) ₃ CCH ₂ CH(CH ₃) ₂ (540-84-1)	-	Ex	Ex	Ex*	Ex*
	Kerosene	N/A (8008-20-6)	-	Ex	Ex	Ex*	Ex*
	Mesitylene $C_6H_3(CH_3)_3$ - Ex (1,3,5-Trimethylbenzene) $(108-67-8)$ - N/A	Ex	Ex*	Ex*			
ntinued	Mineral spirits / White spirits (Stoddard solvent)	N/A (8052-41-3)	-	Ex	Ex	Ex*	Ex*
Hydrocarbons continued	Naphtha	N/A (8030-30-6)	1	Ex	Ex	Ex*	Ex*
Hydrocal	Naphthalene (naphthalin, white tar)	$C_{10}H_8$ (91-20-3)	-	Ex	Ex	Ex*	Ex*
	Paraffin	N/A (8002-74-2)	1	Ex	Ex	Ex*	Ex*
	Pentane	CH ₃ CH ₂ CH ₂ CH ₂ CH ₃ (109-66-0)	1	Ex	Ex	Ex*	-
	Toluene (methylbenzene, phenylmethane, toluol)	C ₆ H ₅ CH ₃ (108-88-3)	-	Ех	Ех	Ex*	Ex*
	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	Ex*	Ex*

Note: Provisional data only - test work on-going. Results to be confirmed at completion of 12 months testing.

Excellent Ex no significant deterioration / barrier properties retained for greater than 52 weeks suitable for all applications including long term immersion		
Good G no significant deterioration / barrier properties retained for 12 - 52 weeks suitable for short-term immersion and general chemical contact		no significant deterioration / barrier properties retained for 12 - 52 weeks suitable for short-term immersion and general chemical contact
Moderate M no significant deterioration / barrier properties retained for 1 - 12 weeks suitable for applications involving short term chemical contact e.g. spillage, splashing or secondary containment		
Poor significant deterioration / loss of barrier properties after 1 week or less not suitable for any application		
*		Product must be post cured to deliver quoted chemical resistance
Ex		Bold text highlights real life data obtained via chemical resistance testing
Ex		Normal font indicates that the resistance has been predicted based upon partial test data and/or similar reagents

The technical data contained herein is based on the results of long term tests carried out in our laboratories and to the best of our knowledge is true and accurate on the date of publication. It is however, subject to change without prior notice and the user should contact Belzona to verify the technical data is correct before specifying or ordering. No guarantee of accuracy is given or implied. We assume no responsibility for rates of coverage, performance or injury resulting from use. Liability, if any, is limited to the replacement of products. No other warranty or guarantee of any kind is made by Belzona, express or implied, whether statutory, by operation of law or otherwise, including merchantability or fitness for a particular purpose. Nothing in the foregoing statement shall exclude or limit any liability of Belzona to the extent such liability cannot by law be excluded or limited.