

# CHEMICAL RESISTANCE OF BELZONA® 4141

FN 10226



	Chemical name (Synonym)	Chemical formula (CAS number)	Concentration	Chemical Resistance Rating at 20°C (68°F)
Inorganic Acids	Hydrochloric acid	HCl  (7647-01-0)	36%	<b>P</b>
			20%	<b>M</b>
			10%	<b>Ex</b>
			5%	<b>Ex</b>
	Phosphoric acid (orthophosphoric acid)	H <sub>3</sub> PO <sub>4</sub>  (7664-38-2)	10%	<b>P</b>
			5%	<b>P</b>
	Nitric acid	HNO <sub>3</sub>  (7697-37-2)	10%	<b>P</b>
			5%	<b>P</b>
Sulphuric acid	H <sub>2</sub> SO <sub>4</sub>  (7664-93-9)	50%	<b>G</b>	
		30%	<b>G</b>	
		20%	<b>G</b>	
		10%	<b>G</b>	
Organic Acids	Acetic acid (ethanoic acid)	CH <sub>3</sub> COOH  (64-19-7)	5%	<b>P</b>
			1%	<b>P</b>
	Lactic acid (2-hydroxypropanoic acid)	CH <sub>3</sub> CH(OH)(COOH)  (50-21-5/79-33-4/10326-41-7)	5%	<b>P</b>
1%			<b>P</b>	
Phenol	C <sub>6</sub> H <sub>5</sub> OH  (108-95-2)	80%	<b>P</b>	
Alcohols, Aldehydes and Ketones	Acetone (propanone)	(CH <sub>3</sub> ) <sub>2</sub> CO  (67-64-1)	-	<b>P</b>
	Amyl alcohol	C <sub>5</sub> H <sub>11</sub> OH  (71-41-0)	-	<b>M</b>
	n-Butanol (butyl alcohol)	C <sub>4</sub> H <sub>9</sub> OH  (71-36-3)	-	<b>M</b>
	Ethanol (ethyl alcohol)	CH <sub>3</sub> CH <sub>2</sub> OH  (64-17-5)	-	<b>P</b>
	Ethylene glycol (ethan-1,2-diol, monoethylene glycol, MEG)	(CH <sub>2</sub> OH) <sub>2</sub>  (107-21-1)	-	<b>Ex</b>
	Glycerol (glycerine, propane-1,2,3-triol)	HOCH <sub>2</sub> CH(OH)CH <sub>2</sub> OH  (56-81-5)	-	<b>Ex</b>
	n-Hexanol (hexyl alcohol)	C <sub>6</sub> H <sub>13</sub> OH  (111-27-3)	-	<b>G</b>
	Isopropyl alcohol (IPA) (isopropanol, propan-2-ol)	CH <sub>3</sub> CH(OH)CH <sub>3</sub>  (67-63-0)	-	<b>M</b>

<b>Excellent</b>	<b>Ex</b>	The product is suitable for repeated spillage contact over long periods (resistant for greater than 12 weeks).
<b>Good</b>	<b>G</b>	The product is suitable for repeated spillage contact over short periods (resistant for 4 - 12 weeks).
<b>Moderate</b>	<b>M</b>	The product is suitable for occasional spillage contact over short periods (resistant for 1 - 4 weeks).
<b>Poor</b>	<b>P</b>	The product is not suitable for any application involving contact with the chemical (resistant for less than 1 week).
<b>Ex</b>		<b>Bold</b> text highlights real life data obtained via chemical resistance testing
<b>Ex</b>		Normal font indicates that the resistance has been predicted based upon partial test data and/or similar reagents
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Alcohols, Aldehydes and Ketones	Isobutyl alcohol (IBA) (isobutanol, 2-methylpropan-1-ol)	(CH <sub>3</sub> ) <sub>2</sub> CHCH <sub>2</sub> OH (78-83-1)	-	M
	Methanol (methyl alcohol)	CH <sub>3</sub> OH (67-56-1)	-	P
	Methyl ethyl ketone (MEK) (2-butanone, methyl acetone)	CH <sub>3</sub> C(O)CH <sub>2</sub> CH <sub>3</sub> (78-93-3)	-	P
	Methyl isobutyl ketone (MIBK) (hexone, 4-Methylpentan-2-one)	(CH <sub>3</sub> ) <sub>2</sub> CHCH <sub>2</sub> C(O)CH <sub>3</sub> (108-10-1)	-	P
	Propan-1-ol (Propyl alcohol)	CH <sub>3</sub> CH <sub>2</sub> CH <sub>2</sub> OH (71-23-8)	-	M
	Propylene glycol (1,2-Propanediol)	CH <sub>3</sub> CH(OH)CH <sub>2</sub> OH (57-55-6)	-	Ex
Alkalis / Bases	Ammonia solution (ammonium hydroxide)	NH <sub>3</sub> (aq) (1336-21-6)	25%	Ex
			10%	Ex
	Potassium hydroxide (caustic potash)	KOH  1310-58-3	40%	Ex
			20%	Ex
			10%	Ex
	Sodium hydroxide (caustic soda)	NaOH  1310-73-2	50%	Ex
40%			Ex	
20%			Ex	
Amines & Amides	Diethanolamine (DEA) (2,2'-iminodiethanol)	HN(CH <sub>2</sub> CH <sub>2</sub> OH) <sub>2</sub> (111-42-2)	-	Ex
	Diethylene glycolamine (DGA) (2-(2-aminoethoxy) ethanol)	H <sub>2</sub> NCH <sub>2</sub> CH <sub>2</sub> OCH <sub>2</sub> CH <sub>2</sub> OH (929-06-6)	-	P
	N-Methyl diethanolamine (MDEA)	CH <sub>3</sub> N(CH <sub>2</sub> CH <sub>2</sub> OH) <sub>2</sub> (105-59-9)	-	Ex
	Monoethanolamine (MEA) (2-aminoethanol)	H <sub>2</sub> NCH <sub>2</sub> CH <sub>2</sub> OH (141-43-5)	-	P
	Triethanolamine (TEA) (2,2',2''-nitrilotriethanol)	N(CH <sub>2</sub> CH <sub>2</sub> OH) <sub>3</sub> (102-71-6)	-	Ex

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Esters & Ethers	Butyl acetate	C <sub>6</sub> H <sub>12</sub> O <sub>2</sub> (123-86-4)	-	P
	Dibutyl ether	C <sub>8</sub> H <sub>18</sub> O (142-96-1)	-	Ex
	Diethyl ether	(C <sub>2</sub> H <sub>5</sub> ) <sub>2</sub> O (60-29-7)	-	Ex
	Ethyl acetate	CH <sub>3</sub> COOCH <sub>2</sub> CH <sub>3</sub> (141-78-6)	-	P
Gases	Butane	CH <sub>3</sub> CH <sub>2</sub> CH <sub>2</sub> CH <sub>3</sub> (106-97-8)	-	Ex
	Carbon dioxide	CO <sub>2</sub> (124-38-9)	-	Ex
	Carbon monoxide	CO (630-08-0)	-	Ex
	Chlorine (dry)	Cl <sub>2</sub> (7782-50-5)	-	Ex
	Chlorine (wet)	Cl <sub>2</sub> (7782-50-5)	-	G
	Ethane	C <sub>2</sub> H <sub>6</sub> (74-84-0)	-	Ex
	Hydrogen	H <sub>2</sub> (1333-74-0)	-	Ex
	Hydrogen sulphide	H <sub>2</sub> S (7783-06-4)	-	Ex
	Methane (natural gas)	CH <sub>4</sub> (74-82-8)	-	Ex
	Nitrogen	N <sub>2</sub> (7727-37-9)	-	Ex
	Nitrous oxide (dinitrogen monoxide)	N <sub>2</sub> O (10024-97-2)	-	Ex
	Ozone (dry)	O <sub>3</sub> (10028-15-6)	-	Ex
	Ozone (wet)	O <sub>3</sub> (10028-15-6)	-	G
	Sulphur dioxide	SO <sub>2</sub> (7446-09-5)	-	Ex
Sulphur trioxide (sulphuric anhydride)	SO <sub>3</sub> (7446-11-9)	-	Ex	

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Hydrocarbons	Aviation fuel (AVCAT, AVGAS, AVTAG, AVTUR)	N/A	-	Ex
	Crude Oil	N/A	-	M
	Cyclohexane	C <sub>6</sub> H <sub>12</sub> (110-82-7)	-	Ex
	Diesel	N/A	-	Ex
	Ethyl benzene (ethyl benzol, EB)	C <sub>6</sub> H <sub>5</sub> CH <sub>2</sub> CH <sub>3</sub> (100-41-4)	-	M
	Gasoline (petrol)	N/A (8032-32-4)	-	M
	Heptane	CH <sub>3</sub> CH <sub>2</sub> CH <sub>2</sub> CH <sub>2</sub> CH <sub>2</sub> CH <sub>2</sub> CH <sub>3</sub> (142-82-5)	-	Ex
	Hexane	CH <sub>3</sub> CH <sub>2</sub> CH <sub>2</sub> CH <sub>2</sub> CH <sub>2</sub> CH <sub>3</sub> (110-54-3)	-	Ex
	Iso-octane (2,2,4-trimethylpentane)	(CH <sub>3</sub> ) <sub>3</sub> CCH <sub>2</sub> CH(CH <sub>3</sub> ) <sub>2</sub> (540-84-1)	-	Ex
	Kerosene	N/A (8008-20-6)	-	Ex
	Mesitylene (1,3,5-Trimethylbenzene)	C <sub>6</sub> H <sub>3</sub> (CH <sub>3</sub> ) <sub>3</sub> (108-67-8)	-	M
	Mineral spirits / White spirits (Stoddard solvent)	N/A (8052-41-3)	-	Ex
	Naphthalene (naphthalin, white tar)	C <sub>10</sub> H <sub>8</sub> (91-20-3)	-	Ex
	Paraffin	N/A (8002-74-2)	-	Ex
	Pentane	CH <sub>3</sub> CH <sub>2</sub> CH <sub>2</sub> CH <sub>2</sub> CH <sub>3</sub> (109-66-0)	-	Ex
	Toluene (methylbenzene, phenylmethane, toluol)	C <sub>6</sub> H <sub>5</sub> CH <sub>3</sub> (108-88-3)	-	M
Xylene (dimethyl benzene, xylol)	C <sub>6</sub> H <sub>4</sub> (CH <sub>3</sub> ) <sub>2</sub> (95-47-6/108-38-3/106-42-3/1330-20-7)	-	M	

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Salts	Aluminium chloride	AlCl <sub>3</sub> (7446-70-0)	10%	Ex
	Aluminium sulphate	Al <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub> (10043-01-3)	10%	Ex
	Ammonium chloride	NH <sub>4</sub> Cl (12125-02-9)	10%	Ex
	Ammonium sulphate	(NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub> (7783-20-2)	10%	Ex
	Copper sulphate	CuSO <sub>4</sub> (7758-98-7)	10%	Ex
	Ferric chloride	FeCl <sub>3</sub> (7705-08-0)	10%	Ex
	Ferric sulphate	Fe <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub> (10028-22-5)	10%	Ex
	Ferrous chloride	FeCl <sub>2</sub> (7758-94-3)	10%	G
	Ferrous sulphate	FeSO <sub>4</sub> (7720-78-7)	10%	G
	Magnesium chloride	MgCl <sub>2</sub> (7786-30-3)	10%	Ex
	Magnesium sulphate (Epsom salt)	MgSO <sub>4</sub> (7487-88-9)	10%	Ex
	Potassium chloride	KCl (7447-40-7)	10%	Ex
	Potassium sulphate	K <sub>2</sub> SO <sub>4</sub> (7778-80-5)	10%	Ex
	Sodium hypochlorite (bleach)	NaClO (7681-52-9)	12%	G
	Sodium nitrate	NaNO <sub>3</sub> (7631-99-4)	10%	Ex
	Sodium sulphate	Na <sub>2</sub> SO <sub>4</sub> (7757-82-6)	10%	Ex
	Sodium sulphide	Na <sub>2</sub> S (1313-82-2)	10%	Ex

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