CHEMICAL RESISTANCE OF BELZONA® 5821

FN 10182

	Chemical name (Synonym)	Chemical formula (CAS number)	Concentration	20 ˚C 68 ˚F	Other
Inorganic Acids	Carbonic acid	H_2CO_3 (463-79-6)	-	Ex	-
	Fluorosilicic acid	H_2SiF_6 (16961-83-4)	-	M	-
	Hydrobromic acid	HBr (10035-10-6)	5%	Ex	-
	Hydrochloric acid	HCl (7647-01-0)	36% 20% 10% 5%	P M G Ex	Pass 72 hrs in 36% - -
	Nitric acid	HNO_3 (7697-37-2)	20% 10% 5%	M G Ex	- - -
	Nitrous acid	HNO_2 (7782-77-6)	10%	Ex	-
	Oleum		-	P	-
	Phosphoric acid (orthophosphoric acid)	H_3PO_4 (7664-38-2)	85% 10%	P G	Pass 72 hrs in 85%
	Sulfuric acid	H_2SO_4 (7664-93-9)	98% 20% 10% 5%	P M G Ex	Pass 72 hrs in 50% - - -
Organic Acids	Acetic acid (ethanoic acid)	CH_3COOH (64-19-7)	20% 5%	P M	Pass 72 hrs in 10% -
	Chlorosulfonic acid (sulfurochloridic acid)	HSO_3Cl (7790-94-5)	-	M	-
	Citric acid	$C_6H_8O_7$ (77-92-9)	-	G	-
	Cresylic acid (cresol)	C_7H_8O (1319-77-3)	-	P	-
	Formic acid (methanoic acid)	HCOOH (64-18-6)	20% 5%	P M	- -
	Lactic acid (2-hydroxypropanoic acid)	$CH_3CH(OH)(COOH)$ (50-21-5/79-33-4/10326-41-7)	10%	M	-
	Phenol	C_6H_5OH (108-95-2)	80%	P	-
Alcohols	n-Butanol (butyl alcohol)	C_4H_9OH (71-36-3)	-	Ex	-
	Ethanol (ethyl alcohol)	CH_3CH_2OH (64-17-5)	-	M	-
	Ethylene glycol (ethan-1,2-diol, monoethylene glycol, MEG)	$(CH_2OH)_2$ (107-21-1)	-	Ex	-
	Glycerol (glycerine, propane-1,2,3-triol)	$HOCH_2CH(OH)CH_2OH$ (56-81-5)	-	Ex	-
	Higher alcohols	$C_nH_{(2n+1)}OH$ where n > 2	-	Ex	-
	Methanol (methyl alcohol)	CH_3OH (67-56-1)	-	P	Pass 72 hrs
	2-Methoxyethanol	$C_3H_8O_2$ (109-86-4)	-	Ex	-

Excellent	**Ex**	Suitable for all reasonable applications including immersion.
Good	**G**	Suitable for applications involving immersion for short periods, splashing and contact with fumes.
Moderate	**M**	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.
Poor	**P**	*Not suitable for any applications involving contact with the chemical itself or fumes evolved from it.*
*		Product must be post cured to deliver quoted chemical resistance

CHEMICAL RESISTANCE OF BELZONA® 5821

FN 10182

	Chemical name (Synonym)	Chemical formula (CAS number)	Concentration	20 ˚C 68 ˚F	Other
Alcohols continued	Propan-1-ol (Propyl alcohol)	$CH_3CH_2CH_2OH$ (71-23-8)	-	Ex	-
	Propylene glycol (1,2-Propanediol)	$CH_3CH(OH)CH_2OH$ (57-55-6)	-	Ex	-
	Secondary alcohols	R_1R_2CHOH	-	Ex	-
	Tertiary alcohols	$R_1R_2R_3COH$	-	Ex	-
Alkalis	Ammonia	NH_3 (7664-41-7)	20% 10%	Ex Ex	- -
	Barium hydroxide	$Ba(OH)_2$ (17194-00-2)	-	Ex	-
	Calcium hydroxide (lime water)	$Ca(OH)_2$ (1305-62-0)	-	Ex	-
	Magnesium hydroxide (milk of magnesia)	$Mg(OH)_2$ (1309-42-8)	-	Ex	-
	Potassium hydroxide (caustic potash)	KOH (1310-58-3)	40% 20% 10%	Ex Ex Ex	- - -
	Sodium hydroxide (caustic soda)	NaOH (1310-73-2)	50% 40% 20% 10%	Ex Ex Ex Ex	- - -
Amines & Amides	Aniline (Phenylamine)	$C_6H_5NH_2$ (62-53-3)	-	M	-
	Diethanolamine	$HN(CH_2CH_2OH)_2$ (111-42-2)	-	Ex	-
	Diethylamine	$CH_3CH_2NHCH_2CH_3$ (109-89-7)	-	P	-
	Dimethylformamide	$(CH_3)_2NC(O)H$ (68-12-2)	-	P	-
	Methylamine (25% in water)	CH_3NH_2 (74-89-5)	-	G	-
	Pyridine	C_5H_5N (110-86-1)	-	P	-
	Triethanolamine (TEA) (2,2',2"-nitrilotriethanol)	$N(CH_2CH_2OH)_3$ (102-71-6)	-	Ex	-
Beverages & Foodstuffs	Beer		-	Ex	-
	Cider		-	Ex	-
	Citrus juices		-	Ex	-
	Fermentation liquor		-	Ex	-
	Glucose		-	Ex	-
	Milk		-	G	-
	Sugar solution		-	Ex	-
	Vinegar		-	M	-
	Whisky and Wine		-	Ex	-

Excellent	**Ex**	Suitable for all reasonable applications including immersion.
Good	**G**	Suitable for applications involving immersion for short periods, splashing and contact with fumes.
Moderate	**M**	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.
Poor	**P**	*Not suitable for any applications involving contact with the chemical itself or fumes evolved from it.*
*		Product must be post cured to deliver quoted chemical resistance

CHEMICAL RESISTANCE OF BELZONA® 5821

FN 10182

	Chemical name (Synonym)	Chemical formula (CAS number)	Concentration	20 ˚C 68 ˚F	Other
Esters & Ethers	Amyl acetate	$CH_3COO(CH_2)_4CH_3$ (628-63-7)	-	G	-
	Butyl acetate	$C_6H_{12}O_2$ (123-86-4)	-	G	-
	Dibutyl adipate	$[CH_2CH_2CO_2(CH_2)_3CH_3]_2$ (105-99-7)	-	Ex	-
	Dibutyl phthalate	$C_{16}H_{22}O_4$ (84-74-2)	-	Ex	-
	Dibutyl sebacate	$C_{18}H_{34}O_4$ (109-43-3)	-	Ex	-
	Diethyl ether	$(C_2H_5)_2O$ (60-29-7)	-	Ex	
	Dioctyl adipate	$C_{22}H_{42}O_4$ (123-79-5)	-	Ex	-
	Dioctyl phthalate	$C_6H_4(C_8H_{17}COO)_2$ (117-81-7)	-	Ex	-
	Dioctyl sebacate	$(CH_2)_8(COOC_8H_{17})_2$	-	Ex	-
	Diphenyl isodecyl phosphate	$C_{22}H_{31}O_4P$ (29761-21-5)	-	Ex	-
	Ethyl acetate	$CH_3COOCH_2CH_3$ (141-78-6)	-	G	-
	Isopropyl ether	$C_6H_{14}O$ (108-20-3)	-	Ex	-
	Methyl acetate	CH_3COOCH_3 (79-20-9)	-	G	-
Gases	Carbon dioxide (dry)	CO_2 (124-38-9)	-	Ex	-
	Carbon monoxide	CO (630-08-0)	-	Ex	-
	Chlorine (dry)	Cl_2 (7782-50-5)	-	Ex	-
	Chlorine (wet)	Cl_2 (7782-50-5)	-	M	-
	Hydrogen	H_2 (1333-74-0)	-	Ex	-
	Natural Gas (Methane)	CH_4	-	Ex	-
	Nitrogen	N_2 (7727-37-9)	-	Ex	-
	Nitrous oxide (dinitrogen monoxide)	N_2O (10024-97-2)	-	Ex	-
	Ozone (dry)	O_3 (10028-15-6)	-	Ex	-
	Ozone (aqueous solution)		-	M	-
	Sulphur dioxide	SO_2 (7446-09-5)	-	Ex	-
	Sulphur trioxide (sulphuric anhydride)	SO_3 (7446-11-9)	-	Ex	-

Excellent	**Ex**	Suitable for all reasonable applications including immersion.
Good	**G**	Suitable for applications involving immersion for short periods, splashing and contact with fumes.
Moderate	**M**	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.
Poor	**P**	*Not suitable for any applications involving contact with the chemical itself or fumes evolved from it.*
*		Product must be post cured to deliver quoted chemical resistance

CHEMICAL RESISTANCE OF BELZONA® 5821

FN 10182

	Chemical name (Synonym)	Chemical formula (CAS number)	Concentration	20 ˚C 68 ˚F	Other
Halocarbons	Carbon tetrachloride	CCl_4 (56-23-5)	-	G	-
	Chlorobenzene	C_6H_5Cl (108-90-7)	-	M	-
	Chloroform	$CHCl_3$ (67-66-3)	-	G	-
	Dry cleaning fluids		-	G	-
	Methylene chloride (dichloromethane)	CH_2Cl_2 (75-09-2)	-	P	-
	Perchloroethylene (tetrachloroethylene)	$Cl_2C=CCl_2$ (127-18-4)	-	G	-
	1,1,1, - Trichloroethane (methyl chloroform)	CH_3CCl_3 (71-55-6)	-	G	-
Hydrocarbons	Aviation fuel (AVCAT, AVGAS, AVTAG, AVTUR)	N/A	-	Ex	-
	Benzene (benzol)	C_6H_6 (71-43-2)	-	M	-
	Cyclohexane	C_6H_{12} (110-82-7)	-	G	-
	Gasoline (Petrol)		-	G	-
	Heptane	$CH_3CH_2CH_2CH_2CH_2CH_2CH_3$ (142-82-7)	-	Ex	-
	Hexane	$CH_3CH_2CH_2CH_2CH_2CH_3$ (110-54-3)	-	Ex	-
	Iso-octane (2,2,4-trimethylpentane)	$(CH_3)_3CCH_2CH(CH_3)_2$ (540-84-1)	-	Ex	-
	Kerosene	N/A (8008-20-6)	-	Ex	-
	Paraffin	N/A (8002-74-2)	-	Ex	-
	Pentane	$CH_3CH_2CH_2CH_2CH_3$ (109-66-0)	-	Ex	-
	Styrene	$C_6H_5CH=CH_2$ (100-42-5)	-	G	-
	Toluene (methylbenzene, phenylmethane, toluol)	$C_6H_5CH_3$ (108-88-3)	-	P	-
	White Spirit (Stoddard solvent, Mineral spirits)	(8052-41-3)	-	Ex	-
	Xylene (dimethyl benzene, xylol)	$C_6H_4(CH_3)_2$ (95-47-6/108-38-3/106-42-3/1330-20-7)	-	M	-
Ketones	Acetone	$(CH_3)_2CO$ (67-64-1)	-	M	-
	Methyl ethyl ketone (MEK, butanone)	$CH_3C(O)CH_2CH_3$ (78-93-3)	-	M	-
Miscellaneous	Bleach		-	M	-
	Brake fluid		-	Ex	-
	Drilling mud		-	Ex	-
	Emulsion paint		-	Ex	-
	Fertilizer solutions		-	Ex	-
	Grease		-	Ex	-

Excellent	**Ex**	Suitable for all reasonable applications including immersion.
Good	**G**	Suitable for applications involving immersion for short periods, splashing and contact with fumes.
Moderate	**M**	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.
Poor	**P**	*Not suitable for any applications involving contact with the chemical itself or fumes evolved from it.*
*		Product must be post cured to deliver quoted chemical resistance

CHEMICAL RESISTANCE OF BELZONA® 5821

FN 10182

	Chemical name (Synonym)	Chemical formula (CAS number)	Concentration	20 ˚C 68 ˚F	Other
Miscellaneous continued	Ink (water based)		-	Ex	-
	Mercury	Hg	-	Ex	-
	Mine waters (acid)		-	Ex	-
	Oil/water mixtures		-	Ex	-
	Water, distilled		-	Ex	-
	Water, fresh		-	Ex	-
	Water, sea		-	Ex	-
Oils - Mineral	Bunker oils (fuel oils)		-	Ex	-
	Crude oil		-	Ex	-
	Cutting oils, water emulsions		-	Ex	-
	Diesel oil		-	Ex	-
	Lubricating oil		-	Ex	-
	Transformer oil		-	Ex	-
Oils - Vegetable/ Animal	Castor oil		-	Ex	-
	Coconut oil		-	Ex	-
	Cod liver oil		-	Ex	-
	Corn oil		-	Ex	-
	Linseed oil		-	Ex	-
	Olive oil		-	Ex	-
Salts	Aluminium chloride (dry)	$AlCl_3$ (7446-70-0)	-	Ex	-
	Aluminium sulphate	$Al_2(SO_4)_3$ (10043-01-3)	-	Ex	-
	Alums		-	Ex	-
	Ammonium bicarbonate	$(NH_4)HCO_3$ (1066-33-7)	-	Ex	-
	Ammonium carbonate	$(NH_4)_2CO_3$ (506-87-6)	-	Ex	-
	Ammonium chloride	NH_4Cl (12125-02-9)	-	Ex	-
	Ammonium monophosphate	$NH_4H_2PO_4$ (7722-76-1)	-	Ex	-
	Ammonium phosphate (dibasic)	$(NH_4)_2HPO_4$ (7783-28-0)	-	Ex	-
	Ammonium phosphate (tribasic)	$(NH_4)_3PO_4$ (10361-65-6)	-	Ex	-
	Ammonium nitrate	NH_4NO_3 (6484-52-2)	-	Ex	-
	Ammonium sulfate	$(NH_4)_2SO_4$ (7783-20-2)	-	Ex	-
	Antimony trichloride	$SbCl_3$ (10025-91-9)	-	Ex	-
	Barium carbonate	$BaCO_3$ (513-77-9)	-	Ex	-
	Barium chloride	$BaCl_2$ (10361-37-2)	-	Ex	-
	Barium sulfate	$BaSO_4$ (7727-43-7)	-	Ex	-
	Brines		-	Ex	-
	Calcium bisulfite	$Ca(HSO_3)_2$ (13780-03-5)	-	Ex	-
	Calcium carbonate	$CaCO_3$ (471-34-1)	-	Ex	-

Excellent	**Ex**	Suitable for all reasonable applications including immersion.
Good	**G**	Suitable for applications involving immersion for short periods, splashing and contact with fumes.
Moderate	**M**	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.
Poor	**P**	*Not suitable for any applications involving contact with the chemical itself or fumes evolved from it.*
*		Product must be post cured to deliver quoted chemical resistance

CHEMICAL RESISTANCE OF BELZONA® 5821

FN 10182

	Chemical name (Synonym)	Chemical formula (CAS number)	Concentration	20 ˚C 68 ˚F	Other
Salts continued	Calcium chloride		-	Ex	-
	Calcium hypochlorite	$Ca(ClO)_2$ (7778-54-3)	-	Ex	-
	Calcium sulphate	$CaSO_4$ (7778-18-9)	-	Ex	-
	Chrome alum	$KCr(SO_4)_2$ (10141-00-1)	-	Ex	-
	Copper acetate	$Cu(CH_3COO)_2$ (142-71-2)	-	Ex	-
	Copper chloride	$CuCl_2$ (7447-39-4)	-	Ex	-
	Copper nitrate	$Cu(NO_3)_2$ (3251-23-8)	-	Ex	-
	Copper sulphate	$CuSO_4$ (7758-98-7)	-	Ex	-
	Ferric chloride (dry)	$FeCl_3$ (7705-08-0)	-	Ex	-
	Ferric nitrate	$Fe(NO_3)_3$ (10421-48-4)	-	Ex	-
	Ferric sulfate	$Fe_2(SO_4)_3$ (10028-22-5)	-	Ex	-
	Ferrous chloride	$FeCl_2$ (7758-94-3)	-	Ex	-
	Ferrous sulfate	$FeSO_4$ (7720-78-7)	-	G	-
	Lead acetate	$Pb(CH_3COO)_2$ (301-04-2)	-	Ex	-
	Magnesium bisulfate	$Mg(HSO_4)_2$ (10028-26-9)	-	Ex	-
	Magnesium chloride	$MgCl_2$ (7786-30-3)	-	Ex	-
	Magnesium sulphate (Epsom salt)	$MgSO_4$ (7487-88-9)	-	Ex	-
	Mercuric chloride	$HgCl_2$ (7487-94-7)	-	Ex	-
	Mercuric cyanide	$Hg(CN)_2$ (592-04-1)	-	Ex	-
	Nickel ammonium sulfate	$(NH_4)_2Ni(SO_4)_2$ (7785-20-8)	-	Ex	-
	Nickel chloride	$NiCl_2$ (7718-54-9)	-	Ex	-
	Nickel nitrate	$Ni(NO_3)_2$ (13138-45-9)	-	Ex	-
	Nickel sulfate	$NiSO_4$ (7786-81-4)	-	Ex	-
	Potassium aluminium sulphate (potash alum)	$KAl(SO_4)_2$ (10043-67-1)	-	Ex	-
	Potassium bisulfite	$KHSO_3$ (7773-03-7)	-	Ex	-
	Potassium bromide	KBr (7758-02-3)	-	Ex	-
	Potassium carbonate	K_2CO_3 (584-08-7)	-	Ex	-

Excellent	**Ex**	Suitable for all reasonable applications including immersion.
Good	**G**	Suitable for applications involving immersion for short periods, splashing and contact with fumes.
Moderate	**M**	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.
Poor	**P**	*Not suitable for any applications involving contact with the chemical itself or fumes evolved from it.*
*		Product must be post cured to deliver quoted chemical resistance

CHEMICAL RESISTANCE OF BELZONA® 5821

FN 10182

	Chemical name (Synonym)	Chemical formula (CAS number)	Concentration	20 ˚C 68 ˚F	Other
Salts continued	Potassium chlorate	$KClO_3$ (3811-04-9)	-	Ex	-
	Potassium chloride	KCl (7447-40-7)	-	Ex	-
	Potassium cyanide	KCN (151-50-8)	-	Ex	-
	Potassium dichromate	$K_2Cr_2O_7$ (7778-50-9)	-	Ex	-
	Potassium diphosphate	K_2HPO_4 (7758-11-4)	-	Ex	-
	Potassium ferricyanide	$K_3[Fe(CN)_6]$ (13746-66-2)	-	Ex	-
	Potassium ferrocyanide	$K_4[Fe(CN)_6]$ (13943-58-3)	-	Ex	-
	Potassium iodide	KI (7681-11-0)	-	Ex	-
	Potassium nitrate	KNO_3 (7757-79-1)	-	Ex	-
	Potassium permanganate	$KMnO_4$ (7722-64-7)	-	Ex	-
	Potassium sulfate	K_2SO_4 (7778-80-5)	-	Ex	-
	Potassium sulfide	K_2S (1059-82-5)	-	Ex	-
	Potassium sulphite	K_2SO_3 (10117-38-1)	-	Ex	-
	Silver nitrate	$AgNO_3$ (7761-88-8)	-	Ex	-
	Sodium acetate	CH_3COONa (127-09-3)	-	Ex	-
	Sodium aluminate	$NaAlO_2$ (1302-42-7)	-	Ex	-
	Sodium bicarbonate	$NaHCO_3$ (144-55-8)	-	Ex	-
	Sodium bisulfate	$NaHSO_4$ (7681-38-1)	-	Ex	-
	Sodium bisulfite	$NaHSO_3$ (7631-90-5)	-	Ex	-
	Sodium borate (borax)	$Na_2B_4O_7$ (1303-96-4)	-	Ex	-
	Sodium bromide	NaBr (7647-15-6)	-	Ex	-
	Sodium carbonate (soda ash)	Na_2CO_3 (497-19-8)	-	Ex	-
	Sodium chloride	NaCl (7647-14-5)	-	Ex	-
	Sodium chromate	Na_2CrO_4 (7775-11-3)	-	Ex	-
	Sodium cyanide	NaCN (143-33-9)	-	Ex	-
	Sodium fluoride	NaF (7681-49-4)	-	Ex	-

Excellent	**Ex**	Suitable for all reasonable applications including immersion.
Good	**G**	Suitable for applications involving immersion for short periods, splashing and contact with fumes.
Moderate	**M**	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.
Poor	**P**	*Not suitable for any applications involving contact with the chemical itself or fumes evolved from it.*
*		Product must be post cured to deliver quoted chemical resistance

CHEMICAL RESISTANCE OF BELZONA® 5821

FN 10182

	Chemical name (Synonym)	Chemical formula (CAS number)	Concentration	20 ˚C 68 ˚F	Other
Salts continued	Sodium hypochlorite (bleach)	NaClO (7681-52-9)	15%	M	-
	Sodium metaphosphate	$(NaPO_3)_6$ (10124-56-8)	-	Ex	-
	Sodium metasilicate (sodium silicate)	Na_2SiO_3 (6834-92-0)	-	Ex	-
	Sodium nitrate	$NaNO_3$ (7631-99-4)	-	Ex	-
	Sodium phosphate (dibasic)	Na_2HPO_4 (7558-79-4)	-	Ex	-
	Sodium phosphate (tribasic)	Na_3PO_4 (7601-54-9)	-	Ex	-
	Sodium sulfate	Na_2SO_4 (7757-82-6)	-	Ex	-
	Sodium sulfide	Na_2S (1313-82-2)	-	Ex	-
	Stannous chloride (tin chloride)	$SnCl_2$ (7772-99-8)	-	Ex	-
	Zinc chloride	$ZnCl_2$ (7646-85-7)	-	Ex	-
	Zinc hydrosulfite	ZnS_2O_4 (7779-86-4)	-	Ex	-
	Zinc sulfate	$ZnSO_4$ (7733-02-0)	-	Ex	-

Excellent	**Ex**	Suitable for all reasonable applications including immersion.
Good	**G**	Suitable for applications involving immersion for short periods, splashing and contact with fumes.
Moderate	**M**	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.
Poor	**P**	*Not suitable for any applications involving contact with the chemical itself or fumes evolved from it.*
*		Product must be post cured to deliver quoted chemical resistance