

CHEMICAL RESISTANCE OF BELZONA® 4341

FN 10086



	Chemical name (Synonym)	Chemical formula (CAS number)	Concentration	20 °C 68 °F	60°C 140°F	90°C 194°F	Other
Inorganic Acids	Carbonic acid	H ₂ CO ₃ (463-79-6)	-	Ex			-
	Chromic acid	H ₂ CrO ₄ (7738-94-5)	40% 10%	M Ex			- -
	Fluorosilicic acid	H ₂ SiF ₆ (16961-83-4)	10%	Ex			-
	Hydrobromic acid	HBr (10035-10-6)	40% 10%	Ex Ex			- -
	Hydrochloric acid	HCl (7647-01-0)	36%	Ex	Ex	G	-
			25%			G	-
			15%			Ex	-
			10%	Ex			-
			5%		Ex	M	-
	Nitric acid	HNO ₃ (7697-37-2)	60%	P			-
			50%	M			-
			40%	G			-
			30%	Ex	P		-
			15%		M		-
			10%	Ex			-
	5%		Ex	P	-		
	Nitrous acid	HNO ₂ (7782-77-6)	20%	Ex			-
	Oleum		65%	P			-
	Perchloric acid	HClO ₄ (7601-90-3)	60%	M			-
	Phosphoric acid (orthophosphoric acid)	H ₃ PO ₄ (7664-38-2)	85%	Ex		P	-
40%				Ex		-	
30%			Ex			-	
25%				Ex	M	-	
15%				Ex		-	
10%	Ex			-			
Sulfuric acid	H ₂ SO ₄ (7664-93-9)	100%	P			-	
		98%	Ex	Ex	P	-	
		75%		Ex	Ex	-	
		55%		Ex	Ex	-	
		50%	Ex			-	
		45%			Ex	-	
		35%			Ex	-	
		25%			Ex	-	
		20%	Ex			-	
		15%		Ex	Ex	-	
		10%	Ex			-	
5%		Ex	G	-			

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Organic Acids	Acetic acid (ethanoic acid)	CH ₃ COOH (64-19-7)	50%	P			-
			25%		P	P	-
			20%	M			-
			15%		M	P	-
			10%	M			-
			5%		M	M	-
			1%	M*	M	M	-
			0.1%	M*	M	M	-
		Acrylic acid	CH ₂ =CHCO ₂ H (79-10-7)	-	G		
	Citric acid	C ₆ H ₈ O ₇ (77-92-9)	-	Ex			-
	Cresylic acid (cresol)	C ₇ H ₈ O (1319-77-3)	-	P			-
	Formic acid (methanoic acid)	HCOOH (64-18-6)	20%	M			-
	Lactic acid (2-hydroxypropanoic acid)	CH ₃ CH(OH)(COOH) (50-21-5/79-33-4/10326-41-7)	85% 10%	P M			- -
	Stearic acid (solid)	CH ₃ (CH ₂) ₁₆ CO ₂ H (57-11-4)	-	Ex			-
	Tannic acid	C ₇₆ H ₅₂ O ₄₆ (1401-55-4)	-	Ex			-
	Tartaric acid	HO ₂ CCH(OH)CH(OH)CO ₂ H (526-83-0)	-	Ex			-
Alkalis	Ammonia	NH ₃ (7664-41-7)	30%	Ex			-
			10%	Ex			-
	Calcium hydroxide (lime water)	Ca(OH) ₂ (1305-62-0)	-	G			-
	Potassium hydroxide (caustic potash)	KOH (1310-58-3)	20%	P			-
10%			M			-	
Sodium hydroxide (caustic soda)	NaOH (1310-73-2)	40%	P		Ex	-	
		15% 10%	 M		M	 -	
Gases	Butane	C ₄ H ₁₀ (106-97-8)	-	Ex	-		
	Carbon dioxide	CO ₂ (124-38-9)	-	Ex			
	Carbon monoxide	CO (630-08-0)	-	Ex	-		
	Chlorine gas	Cl	-	G	-		
	Hydrogen gas	H	-	Ex	-		
	Hydrogen sulphide	H ₂ S (7783-06-4)	-	Ex	-		
	Natural Gas (Methane)	CH ₄	-	Ex	-		
	Nitrous oxide (dinitrogen monoxide)	N ₂ O (10024-97-2)	-	Ex	-		
	Sulphur dioxide	SO ₂ (7446-09-5)	-	Ex	-		
Sulphur trioxide (sulphuric anhydride)	SO ₃ (7446-11-9)	-	Ex	-			

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Halocarbons	Carbon tetrachloride	CCl ₄ (56-23-5)	-	M	-
	Chlorobenzene	C ₆ H ₅ Cl (108-90-7)	-	M	-
	Chloroform	CHCl ₃ (67-66-3)	-	M	-
	Ethylene dichloride (1,2-dichloroethane)	C ₂ H ₄ Cl ₂ (107-06-2)	-	M	-
	Methylene chloride (dichloromethane)	CH ₂ Cl ₂ (75-09-2)	-	M	-
	Perchloroethylene (tetrachloroethylene)	Cl ₂ C=CCl ₂ (127-18-4)	-	M	-
	1,1,1, - Trichloroethane (methyl chloroform)	CH ₃ CCl ₃ (71-55-6)	-	M	-
	Trichlorotrifluoroethane (CFC-113)	Cl ₂ FC-CClF ₂ (76-13-1)	-	M	-
Hydrocarbons	Benzene (benzol)	C ₆ H ₆ (71-43-2)	-	M	-
	Cyclohexane	C ₆ H ₁₂ (110-82-7)	-	M	-
	Ethane	C ₂ H ₆ (74-84-0)	-	M	-
	Gasoline – Ethanol free (Petrol)		-	M	-
	Heptane	CH ₃ CH ₂ CH ₂ CH ₂ CH ₂ CH ₂ CH ₃ (142-82-7)	-	M	-
	Hexane	CH ₃ CH ₂ CH ₂ CH ₂ CH ₂ CH ₃ (110-54-3)	-	M	-
	Iso-octane (2,2,4-trimethylpentane)	(CH ₃) ₃ CCH ₂ CH(CH ₃) ₂ (540-84-1)	-	M	-
	Kerosene	N/A (8008-20-6)	-	M	-
	Naphtha		-	M	-
	Paraffin	N/A (8002-74-2)	-	M	-
	Petroleum naphtha		-	M	-
	Styrene	C ₆ H ₅ CH=CH ₂ (100-42-5)	-	M	-
	Toluene (methylbenzene, phenylmethane, toluol)	C ₆ H ₅ CH ₃ (108-88-3)	-	M	-
	Turpentine	N/A (8006-64-2)	-	M	-
	White Spirit (Stoddard solvent, Mineral spirits)	N/A (8052-41-3)	-	M	-
Xylene (dimethyl benzene, xylol)	C ₆ H ₄ (CH ₃) ₂ (95-47-6/108-38-3/106-42-3/1330-20-7)	-	M	-	

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Ketones	Acetone	(CH ₃) ₂ CO (67-64-1)	-	M	-
	Formaldehyde	HCHO (50-00-0)	37%	M	-
	Methyl amyl ketone (2-Heptanone)	C ₇ H ₁₄ O (110-43-0)	-	M	-
	Methyl ethyl ketone (MEK, butanone)	CH ₃ C(O)CH ₂ CH ₃ (78-93-3)	-	M	-
Miscellaneous	Brake fluid		-	Ex	-
	Bromine water (saturated)		-	Ex	-
	Carbon disulphide	CS ₂ (75-15-0)	-	M	-
	Dimethyl sulfoxide	(CH ₃) ₂ SO (67-68-5)	-	M	-
	Emulsion paint		-	Ex	-
	Ethylethoxypropionate	C ₇ H ₁₄ O ₃ (763-69-9)	-	Ex	-
	Fertilizer solutions		-	Ex	-
	Grease		-	Ex	-
	Ink (water based)		-	Ex	-
	Isothiazolinone	C ₃ H ₃ NOS (1003-07-2)	-	Ex	-
	Mesitylene (1,3,5-trimethylbenzene)	C ₆ H ₃ (CH ₃) ₃ (108-67-8)	-	Ex	-
	N-Methylpyrrolidone	C ₅ H ₉ NO (872-50-4)	60°C	M	-
			20°C	Ex	-
	Naphthalene	C ₁₀ H ₈ (91-20-3)	-	Ex	-
	Pyrrole	C ₄ H ₄ NH (109-97-7)	-	M	-
	Resins & rosins (natural)		-	Ex	-
	Roof pitch		-	Ex	-
	Rubber latex emulsions		-	Ex	-
	Sewage		-	Ex	-
	Skydrol		-	Ex	-
	Sodium Hypochlorite		12%	M	-
	Starch		-	Ex	-
	Tar		-	Ex	-
	Tetraethyl lead	(CH ₃ CH ₂) ₄ Pb (78-00-2)	-	Ex	-
	Tetrahydrofuran	(CH ₂) ₄ O (109-99-9)	-	M	-
	Urea	CO(NH ₂) ₂ (57-13-6)	-	Ex	-
Water, distilled		-	Ex	-	
Water, fresh		-	Ex	-	
Water, sea		-	Ex	-	

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Oils - Mineral	Castor oil		-	Ex	-
	Coconut oil		-	Ex	-
	Cod liver oil		-	Ex	-
	Corn oil		-	Ex	-
	Diesel oil		-	Ex	-
	Hydraulic oil		-	Ex	-
	Lubricating oil		-	Ex	-
	Oil, petroleum		-	Ex	-
	Oil/water mixtures		-	Ex	-
	Silicone oil		-	Ex	-
	Soybean oil		-	Ex	-
	Transfer oil		-	Ex	-
Tung 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 fluorosilicate	(NH ₄) ₂ SiF ₆ (16919-19-0)	-	Ex	-
	Ammonium nitrate	NH ₄ NO ₃ (6484-52-2)	-	Ex	-
	Ammonium phosphate	(NH ₄) ₃ PO ₄ (10361-65-6)	-	Ex	-
	Ammonium sulfate	(NH ₄) ₂ SO ₄ (7783-20-2)	-	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	-
	Barium sulphide	BaS (21109-95-5)	-	Ex	-
	Brines		-	Ex	-
	Bromine chloride	BrCl (13863-41-7)	-	Ex	-
	Calcium carbonate	CaCO ₃ (471-34-1)	-	Ex	-
	Calcium chloride	CaCl ₂ (10043-52-4)	-	Ex	-
	Calcium fluoride	CaF ₂ (7789-75-5)	-	Ex	-
	Calcium hypochlorite	Ca(ClO) ₂ (7778-54-3)	-	Ex	-
	Calcium sulphate	CaSO ₄ (7778-18-9)	-	Ex	-
	Chromium potassium sulphate (Chrome alum)	KCr(SO ₄) ₂ (10141-00-1)	-	Ex	-

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Salts continued	Copper acetate	$\text{Cu}(\text{CH}_3\text{COO})_2$ (142-71-2)	-	Ex	-
	Copper chloride	CuCl_2 (7447-39-4)	-	Ex	-
	Copper nitrate	$\text{Cu}(\text{NO}_3)_2$ (3251-23-8)	-	Ex	-
	Copper sulphate	CuSO_4 (7758-98-7)	-	Ex	-
	Ferric chloride (dry)	FeCl_3 (7705-08-0)	-	Ex	-
	Ferric nitrate	$\text{Fe}(\text{NO}_3)_3$ (10421-48-4)	-	Ex	-
	Ferric sulfate	$\text{Fe}_2(\text{SO}_4)_3$ (10028-22-5)	-	Ex	-
	Ferrous chloride	FeCl_2 (7758-94-3)	-	Ex	-
	Ferrous sulfate	FeSO_4 (7720-78-7)	-	Ex	-
	Magnesium bisulfate	$\text{Mg}(\text{HSO}_4)_2$ (10028-26-9)	-	Ex	-
	Magnesium carbonate	MgCO_3 (546-93-0)	-	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	$\text{Hg}(\text{CN})_2$ (592-04-1)	-	Ex	-
	Nickel ammonium sulfate	$(\text{NH}_4)_2\text{Ni}(\text{SO}_4)_2$ (7785-20-8)	-	Ex	-
	Nickel chloride	NiCl_2 (7718-54-9)	-	Ex	-
	Nickel nitrate	$\text{Ni}(\text{NO}_3)_2$ (13138-45-9)	-	Ex	-
	Nickel sulphate	NiSO_4 (7786-81-4)	-	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	-
	Potassium chlorate	KClO_3 (3811-04-9)	-	Ex	-
	Potassium chloride	KCl (7447-40-7)	-	Ex	-
	Potassium cyanide	KCN (151-50-8)	-	Ex	-
	Potassium dichromate	$\text{K}_2\text{Cr}_2\text{O}_7$ (7778-50-9)	-	Ex	-
	Potassium diphosphate	K_2HPO_4 (7758-11-4)	-	Ex	-
	Potassium ferricyanide	$\text{K}_3[\text{Fe}(\text{CN})_6]$ (13746-66-2)	-	Ex	-
Potassium ferrocyanide	$\text{K}_4[\text{Fe}(\text{CN})_6]$ (13943-58-3)	-	Ex	-	

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Salts continued	Potassium iodide	KI (7681-11-0)	-	Ex	-
	Potassium nitrate	KNO ₃ (7757-79-1)	-	Ex	-
	Potassium permanganate	KMnO ₄ (7722-64-7)	-	M	-
	Potassium sulfate	K ₂ SO ₄ (7778-80-5)	-	Ex	-
	Potassium sulfide	K ₂ S (1059-82-5)	-	Ex	-
	Potassium sulphite	K ₂ SO ₃ (10117-38-1)	-	Ex	-
	Quaternary ammonium salts		-	Ex	-
	Silver nitrate	AgNO ₃ (7761-88-8)	-	Ex	-
	Sodium acetate	CH ₃ COONa (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 ₂ B ₄ O ₇ (1303-96-4)	-	Ex	-
	Sodium bromide	NaBr (7647-15-6)	-	Ex	-
	Sodium carbonate (soda ash)	Na ₂ CO ₃ (497-19-8)	-	Ex	-
	Sodium chlorate	NaClO ₃ (7775-09-9)	-	Ex	-
	Sodium chloride	NaCl (7647-14-5)	-	Ex	-
	Sodium chromate	Na ₂ CrO ₄ (7775-11-3)	-	Ex	-
	Sodium cyanide	NaCN (143-33-9)	-	Ex	-
	Sodium fluoride	NaF (7681-49-4)	-	Ex	-
	Sodium fluorosilicate	Na ₂ SiF ₆ (16893-85-9)	-	Ex	-
	Sodium metaphosphate	(NaPO ₃) ₆ (10124-56-8)	-	Ex	-
	Sodium metasilicate (sodium silicate)	Na ₂ SiO ₃ (6834-92-0)	-	Ex	-
	Sodium nitrate	NaNO ₃ (7631-99-4)	-	Ex	-
	Sodium phosphate (dibasic)	Na ₂ HPO ₄ (7558-79-4)	-	Ex	-
Sodium phosphate (tribasic)	Na ₃ PO ₄ (7601-54-9)	-	Ex	-	

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Salts continued	Sodium sulfate	Na ₂ SO ₄ (7757-82-6)	-	Ex	-
	Sodium sulfide	Na ₂ S (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 ₂ O ₄ (7779-86-4)	-	Ex	-
	Zinc sulfate	ZnSO ₄ (7733-02-0)	-	Ex	-

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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.