

CHEMICAL RESISTIVITY TABLE

Chemical Name	Formula	Concentration	Acceptability	Chemical Name	Formula	Concentration	Acceptability	Chemical Name	Formula	Concentration	Acceptability
Acetic acid	CH₃COOH	10%	Limited	Hydrochloric acid	HCI	35% w/w (conc.)	Unsuitable	Potassium permanganate	KMnO ₄	All solutions	Unsuitable
Acetic acid	CH₃COOH	50%	Unsuitable	Hydrocyanic acid	HCN	All concentrations	Unsuitable	Potassium nitrate	KNO ₃	Saturated	Limited
Aluminium chloride	NH ₄ Cl	Saturated	Suitable	Hydrogen (gas)	H_2	All concentrations	Unsuitable	Potassium sulphate	K ₂ SO ₄	Saturated	Suitable
Aluminium sulphate	NH ₄ SO ₄	Saturate	Suitable	Hydrogen peroxide	H_2O_2	5% w/w	Limited	Sodium acid phosphate	NaH ₂ PO ₄	Saturated	Limited
Ammonium chloride	NH ₄ Cl	Saturated	Suitable	Hydrogen peroxide	H_2O_2	>20% w/w	Unsuitable	Sodium bisulphite	NaHSO ₃	Saturated	Suitable
Ammonium nitrate	NH ₄ NO ₃	All concentrations	Unsuitable	Iron (ferrous) amm. sulpha	te Fe(NH ₄)SO ₄	Saturated	Suitable	Sodium bromide	NaBr	Saturated	Suitable
Ammonium sulphate	$(NH_4)_2SO_4$	Saturated	Suitable	Iron (ferrous) carbonate	FeCO ₃	Saturated	Suitable	Sodium carbonate	Na ₂ CO ₃	Saturated	Suitable
Aqua regia	HCI-HNO₃	All concentrations	Unsuitable	Iron (ferrous) chloride	FeCl ₂	Saturated	Suitable	Sodium chlorate	NaClO ₃	All concentrations	Unsuitable
Barium carbonate	BaCO ₃	Saturated	Suitable	Iron (ferrous) hydroxide	Fe(OH) ₂	Saturated	Suitable	Sodium chloride	NaCl	Saturated	Suitable
Barium chloride	BaCl ₂	Saturated	Suitable	Iron (ferrous) sulphate	FeSO ₄	Saturated	Suitable	Sodium dichromate	Na ₂ CrO ₇	Saturated	Suitable
Barium hydroxide	Ba(OH) ₂	Saturated	Suitable	Iron (ferric) carbonate	$Fe_2(CO_3)_3$	Saturated	Suitable	Sodium cyanide	NaCN	All concentrations	Unsuitable
Barium sulphate	BaSO ₄	Saturated	Suitable	Iron (ferric) chloride	FeCl ₃	Saturated	Unsuitable	Sodium fluoride	NaF	Saturated	Suitable
Borax (sodium tetra borate	Na ₂ B ₄ O ₇	Saturated	Suitable	Iron (ferric) hydroxide	Fe(OH) ₃	Saturated	Suitable	Sodium hydroxide	NaOH	50% w/w	Suitable
Bromine (gas or liquid)	Br ₂	All concentrations	Unsuitable	Iron (ferric) nitrate	Fe(NO ₃) ₃	Saturated	Unsuitable	Sodium hypochlorite	NaOCl	1% av.Cl ₂	Limited
Calcium carbonate	CaCO ₃	Saturated	Suitable	Iron (ferric) sulphate	$Fe_2(SO_4)_3$	Saturated	Limited	Sodium hypochlorite	NaOCl	10% av.Cl ₂	Unsuitable
Calcium chloride	CaCl ₂	Saturated	Suitable	Magnesium carbonate	$MgCO_3$	Saturated	Suitable	Sodium metasilicate	Na ₂ SiO ₃	Saturated	Suitable
Calcium cyanide	Ca(CN) ₂	All concentrations	Unsuitable	Magnesium chloride	MgCl ₂	Saturated	Suitable	Sodium nitrate	NaNO ₃	Saturated	Suitable
Calcium hydroxide (lime)	Ca(OH) ₂	Saturated	Suitable	Magnesium hydroxide	Mg(OH) ₂	Saturated	Suitable	Sodium nitrite	NaNO ₂	Saturated	Suitable
Calcium nitrate	$Ca(NO_3)_2$	Saturated	Suitable	Magnesium sulphate	$MgSO_4$	Saturated	Suitable	Sodium orthophosphate	Na ₃ PO ₄	Saturated	Suitable
Calcium sulphate	CaSO ₄	Saturated	Suitable	Methyl alcohol	CH₃OH	<35%	Limited	Suitable Sodium perborate	$Na_2B_4O_7.H_2O_2$	Saturated	Suitable
Carbon dioxide (gas)	CO ₂	All concentrations	Suitable	Methyl alcohol	CH₃OH	>35%	Unsuitable	Suitable Sodium perchlorate	NaClO ₄	All concentrations	Unsuitable
Chlorine	Cl ₂ , gas	All concentrations	Unsuitable	Nickel carbonate	NiCO ₃	Saturated	Suitable	Sodium permanganate	NaMnO ₄	All concentrations	Unsuitable
Chromic acid	H ₂ CrO ₇	All concentrations	Unsuitable	Nickel chloride	NiCl ₂	Saturated	Suitable	Sodium sulphate	Na ₂ SO ₄	Saturated	Suitable
Copper carbonate	CuCO ₃	Saturated	Suitable	Nickel hydroxide	Ni(OH) ₂	Saturated	Suitable	Sucrose	C ₆ O ₆ H ₁₂	Saturated	Suitable
Copper (cupric) chloride	CuCl ₂	Saturated	Suitable	Nickel sulphate	NiSO ₄	Saturated	Suitable	Sulphuric acid	H ₂ SO ₄	50% w/w	Suitable
Copper (cupric) hydroxide	Cu(OH) ₂	Saturated	Suitable	Nitric acid	HNO ₃	35% w/w	Limited	Sulphuric acid	H ₂ SO ₄	93% w/w	Unsuitable
Copper (cupric) nitrate	$Cu(NO_3)_2$	Saturated	Suitable	Phosphoric acid (ortho)	H_3PO_4	75% w/w	Suitable	Tin (stannous) chloride	SnCl ₂	Saturated	Suitable
Copper (cupric) sulphate	CuSO ₄	Saturated	Suitable	Potassium carbonate	K_2CO_3	Saturated	Limited	Tin (stannous) sulphate	SnSO ₄	Saturated	Limited
Corn Syrup	C ₆ O ₆ H ₁₂	<50% w/w	Suitable	Potassium chlorate	KCIO ₃	All concentrations	Unsuitable	Urea	CO(NH ₂) ₂	Saturated	Suitable
Corn Syrup	C ₆ O ₆ H ₁₂	>50% w/w	Limited	Potassium chloride	KCl	Saturated	Suitable	Zinc oxide	ZnO	Saturated	Suitable
Ethyl alcohol	C₂H5OH	<35% w/w	Limited	Potassium citrate	$K_3C_4O_7$	Saturated	Suitable	Zinc chloride	ZnCl ₂	Saturated	Suitable
Ethyl alcohol	C₂H₅OH	>35% w/w	Unsuitable	Potassium cyanide	KCN	All concentrations	Unsuitable	Zinc sulphate	ZnSO ₄	Saturated	Suitable
Glycerol	$C_3O_3H_6$	<35% w/w	Limited	Potassium hydroxide	КОН	45% w/w	Suitable				
Glycerol	$C_3O_3H_6$	>35% w/w	Unsuitable	Potassium perchlorate	KCIO ₄	All solutions	Unsuitable				

Disclaimer: The information provided here was determined by a third party using RTT Sealant's sprayed and cured recommended procedures. Samples of RTT Sealant were immersed in the solutions shown for 90 days at room temperature (20±2°C) before examination. The information is provided in good faith and is accurate to the best of our knowledge. Results may vary if the RTT Sealant is incorrectly applied or if unknown contaminants are present. This data provides no guarantee of performance and RTT Sealant accepts no responsibility for any problems which might arise as a result of exposure of RTT Sealant to any of the chemicals described. Additional notes:

- 1. Performance was evaluated by determining the strength of samples before and after immersion in the chemical solutions shown for 180 days at room temperature (22±3°C) according to the method described in ASTM D-412.
- 2. Most of the results were obtained using saturated solutions of the chemical in water. Although it may generally be assumed that a saturated solution represents the worst case, results may differ if more dilute solutions are employed.
- 3. Most of the chemicals listed are solutions of inorganic compounds in water. With rare exceptions RTT Sealant is not recommended for applications in which it is to be in contact with organic compounds such as oils or solvents.
- 4. The list shown is not exhaustive. Please consult with your RTT Sealant Technical Representative for any chemicals, or concentrations thereof which may be of interest but are not on the list.
- **5.** RTT Sealant is not recommended for use with strong oxidizing agents.
- 6. All testing was carried out using pure chemicals. In some cases, the presence of even small quantities of contaminants may dramatically affect the results.
- 7. Please contact the RTT Sealant Technical Department for information about chemicals not included on this list, or if more than one chemical is present in the system.
- 8. "Limited" indicates that occasional contact with the chemical indicated may be tolerated but that continuous exposure is unacceptable. In cases where limited acceptability is indicated, please consult with the RTT Sealant Technical Department.