



Thermachem Drainage and Coupler
Chemical and Substance Resistance Table

Key to use

✓	Excellent for use
?	See comments & check suitability with Naylor
✗	Unsatisfactory for use

Coupler Types

PP / EPDM	High Grade Polypropylene casing with EPDM rubber seal
PP / NBR	High Grade Polypropylene casing with Nitrile rubber seal.
FEP / PTFE	Fluoropolymer Liner with band seal coupling and PTFE seals

If you need information on any chemicals that don't appear on the list or require clarification on any conditions please contact Naylors technical Thermachem team on +44 (0) 1226 794056 or thermachem@naylor.co.uk

This table is intended as a guide for use by specifiers and contractors and is based on research of openly available data undertaken by Naylor. It has been compiled with great care but it is recommended that anyone using the table checks material suitability with another source to cover for any potential errors. As Naylor cannot be aware of site conditions and actual chemicals discharged Naylor can not provide any warranties against chemical attack. If you do find anything wrong with this table please let us know and we'll put it right.

Chemical / Substance	Alternative Name(s)	Chemical or Molecular Formula (if relevant)	Thermachem	Coupler - Case/Seal material			Condition of use if ? Naylor for clarification of conditions)	(Contact
				PP / EPDM	PP / NBR	FEP / PTFE		
Acetaldehyde	Acetic aldehyde / Ethanal	CH ₃ CHO	✓	✓	✗	✓		
Acetamide	Acetic acid amide / Ethanamide	C ₂ H ₅ NO	✓	✓	?	✓		
Acetic acid (30%)	Ethanoic acid / Vinegar / Glacial acetic	CH ₃ COOH	✓	✓	✓	✓		
Acetic acid (100%)	Ethanoic acid / Vinegar / Glacial acetic	CH ₃ COOH	✓	?	?	✓	OK below 50°C	
Acetone	Dimethyl ketone / DMK	(CH ₃) ₂ CO	✓	✓	✗	✓		
Acetonitrile	Methyl cyanide / Cyanomethane	CH ₃ CN	✓	✓	?	✓	Moderate resistance	
Acetophenone	Phenyl methyl ketone	C ₆ H ₅ C(O)CH ₃	✓	?	✗	✓	Unknown	
Acetyl Acetone	2,4-Pentadione / Daicetyl methane	C ₅ H ₈ O ₂	✓	?	✗	✓	Unknown	
Acetylene Tetrabromide	1,1,2,2-tetrabromoethane	C ₂ H ₂ Br ₄	✓	✗	✗	✓		
Acrolein	Acrylic aldehyde / Prop-2-enal	C ₃ H ₄ O	✓	?	✗	✓	Unknown	
Acrylonitrile	Vinylcyanide / 2-Propenenitrile	C ₃ H _{3.5} N	✓	✗	✗	✓		
Adipic acid	Hexanedioic acid	C ₆ H ₁₀ O ₄	✓	✓	✗	✓		
Allyl chloride	3-Chloropropene / 3-Chloropropylene	CH ₂ =CHCH ₂ Cl	✓	✗	✗	✓		
Aluminium acetate		C ₆ H ₉ AlO ₆	✓	✓	?	✓	Potential slow attack	
Aluminium chloride		AlCl ₃	✓	✓	✓	✓		
Aluminium hydroxide		Al(OH) ₃	✓	✓	✓	✓		
Aluminium nitrate		Al(NO ₃) ₃	✓	✓	✓	✓		
Aluminium phosphate		AlPO ₄	✓	✓	✓	✓		
Aluminium sulphate		Al ₂ (SO ₄) ₃	✓	✓	✓	✓		
Ammonium acetate		NH ₄ C ₂ H ₃ O ₂	✓	✓	✗	✓		
Ammonium bifluoride		NH ₄ HF ₂	?	✓	✓	✗	Potential slow attack if concentrated	
Ammonium carbonate		(NH ₄) ₂ CO ₃	✓	✓	✗	✓		
Ammonium chloride	Sal Ammoniac	NH ₄ Cl	✓	✓	✓	✓		
Ammonium dichromate	Ammonium bichromate	(NH ₄) ₂ Cr ₂ O ₇	✓	✓	✓	✓		
Ammonium hydroxide	Household ammonia / Ammonia solution	NH ₄ OH	✓	✓	✗	✓		
Ammonium nitrate	Norway saltpetre	NH ₄ NO ₃	✓	✓	✓	✓		
Ammonium oxalate		C ₂ H ₈ N ₂ O ₄	✓	✓	✓	✓		
Ammonium sulphate		(NH ₄) ₂ SO ₄	✓	✓	✓	✓		
Amyl acetate	Pentyl acetate	CH ₃ COO(CH ₂) ₄ CH ₃	✓	✗	✗	✓		
Amyl alcohol	Pentan-1-ol	C ₅ H ₁₁ OH	✓	✓	?	✓	Slow attack	
Amyl chloride		C ₅ H ₁₁ Cl	✓	✗	✗	✓		
Aniline	Phenylamine / Aminobenzene	C ₆ H ₅ NH ₂	✓	✗	✗	✓		
Aniline hydrochloride	Anilinium chloride	C ₆ H ₅ ClN	?	?	?	✓		
Animal fats			✓	?	✓	✓	Potential slow attack	
Anisole	Phenyl methyl ether / Methoxybenzene	CH ₃ OC ₆ H ₅	✓	✗	✗	✓		
Antimony pentachloride	Antimony perchloride	SbCl ₅	✓	✓	✗	✓		
Aqua regia		HNO ₃ +3 HCl	?	✗	✗	✓	OK below 20°C	
Barium bromide		BaBr ₂	✓	✓	✓	✓		
Barium carbonate		BaCO ₃	✓	✓	✓	✓		
Barium chloride		BaCl ₂	✓	✓	✓	✓		
Barium hydroxide		Ba(OH) ₂	?	✓	✓	✓	Potential slow attack from high temp.	
Barium sulphate		BaSO ₄	✓	✓	✓	✓		
Beer	Lager		✓	✓	✓	✓		
Benzaldehyde	Benzoic aldehyde / Oil of bitter almonds	C ₆ H ₅ CHO	✓	✓	✗	✓		
Benzene	Benzol	C ₆ H ₆	✓	✗	✗	✓		
Benzine	Ligroin / Petroleum ether		✓	✗	✗	✓		
Benzoic acid		C ₆ H ₅ COOH	✓	✗	✗	✓		
Benzyl acetate		C ₉ H ₁₀ O ₂	✓	?	✗	✓	Unknown	
Benzyl alcohol	Phenylmethanol / Phenylcarbinol	C ₆ H ₅ CH ₂ OH	✓	✗	✗	✓		
Benzyl chloride	X-chlorotoluene	C ₆ H ₅ CH ₂ Cl	✓	✗	✗	✓		
Borax	Sodium tetraborate / Sodium borate	Na ₂ B ₄ O ₇ ·10H ₂ O	✓	✓	✓	✓		
Boric acid	Boracic acid / Ortho boric acid	H ₃ BO ₃	✓	✓	✓	✓		
Bromine		Br ₂	✓	✗	✗	✓		
Bromobenzene	Phenylbromide	C ₆ H ₅ Br	✓	✗	✗	✓		
Butyl alcohol	N-Butanol	C ₄ H ₉ OH	✓	?	✓	✓	OK in small amounts, otherwise slow attack	
Butyl acetate	Butyl ethanoate	C ₈ H ₁₆ O ₂	✓	✗	✗	✓		
Butyric acid	Butanoic acid	CH ₃ CH ₂ CH ₂ -COOH	✓	✓	✗	✓		
Calcium bromide		CaBr ₂	✓	✓	✓	✓		
Calcium carbonate	Calcite / Limestone / Marble / Chalk	CaCO ₃	✓	✓	✓	✓		
Calcium chloride		CaCl ₂	✓	✓	✓	✓		
Calcium Hydroxide	Hydrated lime / Lime / Slaked lime	Ca(OH) ₂	?	✓	✓	✓	Slow attack from frequent hot discharges	
Calcium hypochlorite	Chlorine powder / Bleach powder	Ca(ClO) ₂	✓	?	?	✓		
Calcium nitrate		Ca(NO ₃) ₂	✓	✓	✓	✓		
Calcium sulphate	Gypsum / Plaster of Paris	CaSO ₄	✓	✓	✓	✓		
Carbon disulphide		CS ₂	✓	✗	✗	✓		
Carbon tetrachloride	Tetrachloromethane	CCl ₄	✓	✗	✗	✓		
Castor oil			✓	?	?	✓	PP casing OK to 20°C. EPDM may be slowly attacked	

Key to use

✓	Excellent for use
?	See comments & check suitability with Naylor
✗	Unsatisfactory for use

Coupler Types

PP / EPDM	High Grade Polypropylene casing with EPDM rubber seal
PP / NBR	High Grade Polypropylene casing with Nitrile rubber seal.
FEP / PTFE	Fluoropolymer Liner with band seal coupling and PTFE seals

If you need information on any chemicals that don't appear on the list or require clarification on any conditions please contact Naylor's technical Thermachem team on +44 (0) 1226 794056 or thermachem@naylor.co.uk

This table is intended as a guide for use by specifiers and contractors and is based on research of openly available data undertaken by Naylor. It has been compiled with great care but it is recommended that anyone using the table checks material suitability with another source to cover for any potential errors. As Naylor cannot be aware of site conditions and actual chemicals discharged Naylor can not provide any warranties against chemical attack. If you do find anything wrong with this table please let us know and we'll put it right.

Chemical / Substance	Alternative Name(s)	Chemical or Molecular Formula (if relevant)	Thermachem	Coupler - Case/Seal material			Condition of use if ? Naylor for clarification of conditions)	(Contact
				PP / EPDM	PP / NBR	FEP / PTFE		
Chloroacetic acid	Monochloroacetic acid (MCA)	ClCH ₂ CO ₂ H	✓	✗	✗	✓		
Chlorides			✓	✓	✓	✓		
Chloric Acid		HClO ₃	✓	?	✗	✓	Potential slow attack	
Chlorobenzene	Benzene Chloride / Phenyl Chloride	C ₆ H ₅ Cl	✓	✗	✗	✓		
Chloroform	Trichloromethane	CHCl ₃	✓	✗	✗	✓		
Chlorosulfuric Acid	Sulfurochloridic acid	HSO ₃ Cl	✓	✗	✗	✓		
Chromium trioxide	Chromic acid	CrO ₃	✓	✗	✗	✓		
Citric acid		C ₆ H ₈ O ₇ ·H ₂ O	✓	✓	?	✓	Slow attack from strong solutions	
Coal tar	Creosote, Pitch		✓	✗	✗	✓		
Cobalt chloride		CoCl ₂	✓	✓	✓	✓		
Copper nitrate	Cupric nitrate	Cu(NO ₃) ₂	✓	✓	✓	✓		
Copper sulphate	Blue vitriol / Cupric sulphate	CuSO ₄	✓	✓	✓	✓		
Corn oil			✓	✗	✗	✓		
Cresol (mixed Isomers)	Methylphenol	C ₇ H ₈ O	✓	✗	✗	✓		
Crude Oil			✓	✗	?	✓	Potential slow attack	
Cupric chloride		CuCl ₂	✓	✓	✓	✓		
Cuprous chloride	Copper (I) chloride / Copper monochloride	CuCl	✓	✓	✓	✓		
Cyclohexane	Hexahydrobenzene / Hexamethylene	C ₆ H ₁₂	✓	✗	✗	✓		
Decalin	Decahydronaphthalene	C ₁₀ H ₁₈	✓	✗	✗	✓		
Detergents			✓	✓	✓	✓		
Diacetone alcohol	4-hydroxy-4-methyl-pentan-2-one	C ₈ H ₁₂ O ₂	✓	✓	✗	✓		
Diammonium phosphate	Diammonium hydrogen phosphate	(NH ₄) ₂ HPO ₄	✓	✓	✓	✓		
Dichloroethene	1,2-Dichloroethylene	C ₂ H ₂ Cl ₂	✓	✗	✗	✓		
Diesel oil	DERV		✓	✗	✗	✓		
Diethylene glycol	2-(2-Hydroxyethoxy)ethan-1-ol	(HOCH ₂ CH ₂) ₂ O	✓	✓	✓	✓		
Diethyl ether	Ethyl ether / Ether	C ₄ H ₁₀ O	✓	✗	✗	✓		
Diethyl ketone	3-Pentanone	(C ₂ H ₅) ₂ CO	✓	?	✗	✓	Slow attack	
Dimethylaniline	N,N-Dimethylaniline / DMA	C ₈ H ₉ N	✓	?	✗	✓	Slow attack	
1,4-Dioxane		C ₄ H ₈ O ₂	✓	✗	✗	✓		
Diphenyl	Biphenyl / Phenylbenzene	(C ₆ H ₅) ₂	✓	✗	✗	✓		
Disodium hydrogen phosphate		Na ₂ HPO ₄	✓	✓	✓	✓		
Ether			✓	✗	✗	✓		
Ethyl acetate	Ethyl Ethanoate	CH ₃ -COO-CH ₂ -CH ₃	✓	?	✗	✓	Slow attack	
Ethyl alcohol	Ethanol / Alcohol	C ₂ H ₅ OH	✓	✓	✓	✓		
Ethylbenzene	Phenylethane	C ₈ H ₁₀	✓	✗	✗	✓		
Ethyl bromide	Bromoethene	C ₂ H ₅ Br	✓	?	✗	✓	Slow attack	
Ethyl chloride	Chloroethane	C ₂ H ₅ Cl	✓	✗	✗	✓		
Ethylene dichloride	1,2-Dichloroethane	ClCH ₂ CH ₂ Cl	✓	✗	✗	✓		
Ethylene Glycol	Ethane-1,2-Diol	C ₂ H ₆ O ₂	✓	✓	✓	✓		
Fatty Acids			✓	✗	?	✓		
Ferric chloride	Iron chloride / Iron (III) chloride	FeCl ₃	✓	✓	✓	✓		
Ferric nitrate	Iron nitrate / Iron (III) nitrate	Fe(NO ₃) ₃	✓	✓	✓	✓		
Ferric sulphate	Iron sulphate / Iron (III) sulphate	Fe ₂ (SO ₄) ₃	✓	✓	✓	✓		
Ferrous chloride		FeCl ₂	✓	✓	✓	✓		
Ferrous nitrate		Fe(NO ₃) ₂	✓	✓	✓	✓		
Ferrous sulphate	Iron (II) sulphate / Green vitriol	FeSO ₄	✓	✓	✓	✓		
Fish oils			✓	✗	✗	✓		
Fluorobenzene		C ₆ H ₅ F	✓	✗	✗	✓		
Fluoroboric acid	Tetrafluoroboric acid	H ₃ OB ₄	✗	✓	✓	✓		
Fluorosilicic acid	Hexafluorosilicic acid	(H ₂ O) ₂ SiF ₆	✗	✓	✓	✓		
Formaldehyde	Methanal	CH ₂ O	✓	✓	✗	✓		
Formic acid	Methanoic acid	HCOOH	✓	✓	✗	✓		
Fruit Juices			✓	✓	✓	✓		
Furfural			✓	✗	✗	✓		
Gallic Acid			✓	?	?	✓		
Gelatine			✓	✓	✓	✓		
Glucose		C ₆ H ₁₂ O ₆	✓	✓	✓	✓		
Glycerin	Glycerine / Glycerol / propane-1,2,3-triol	C ₃ H ₈ O ₃	✓	✓	✓	✓		
Hydraulic Oil			✓	✗	✗	✓		
Hydrobromic acid	Hydrogen bromide	HBr	✓	✗	✗	✓		
Hydrochloric acid	Muriatic acid	HCl	✓	?	?	✓	EPDM OK to 20°C, NBR OK to 60°C and 10% conc.	
Hydrofluoric acid	Hydrogen fluoride	HF	✗	✗	✗	✓		
Hydrogen peroxide	Hydrogen dioxide / Hydroperoxide	H ₂ O ₂	✓	✗	✗	✓		
Hydroquinone	1,4-Di Hydroxybenzene / B-Quinol	C ₆ H ₄ (OH) ₂	✓	✗	✗	✓		
Isopropyl Alcohol	Isopropanol / 2-Propanol	C ₃ H ₈ O	✓	✓	✗	✓		
Kerosene	Aviation fuel / Jet fuel		✓	✗	?	✓	Potential slow attack	
Lactic acid	Milk acid / Sour milk acid	C ₂ H ₄ OHCOOH	✓	✓	✓	✓		
Lanolin	Wool Grease		✓	✗	?	✓	Potential slow attack	
Latex			✓	✓	✓	✓		
Lead (II) acetate	Sugar of lead	(Pb(CH ₃ COO) ₂)	✓	✓	?	✓	Potential slow attack	

Key to use

✓	Excellent for use
?	See comments & check suitability with Naylor
✗	Unsatisfactory for use

Coupler Types

PP / EPDM	High Grade Polypropylene casing with EPDM rubber seal
PP / NBR	High Grade Polypropylene casing with Nitrile rubber seal.
FEP / PTFE	Fluoropolymer Liner with band seal coupling and PTFE seals

If you need information on any chemicals that don't appear on the list or require clarification on any conditions please contact Naylor's technical Thermachem team on +44 (0) 1226 794056 or thermachem@naylor.co.uk

This table is intended as a guide for use by specifiers and contractors and is based on research of openly available data undertaken by Naylor. It has been compiled with great care but it is recommended that anyone using the table checks material suitability with another source to cover for any potential errors. As Naylor cannot be aware of site conditions and actual chemicals discharged Naylor can not provide any warranties against chemical attack. If you do find anything wrong with this table please let us know and we'll put it right.

Chemical / Substance	Alternative Name(s)	Chemical or Molecular Formula (if relevant)	Thermachem	Coupler - Case/Seal material			Condition of use if ? Naylor for clarification of conditions)	(Contact
				PP / EPDM	PP / NBR	FEP / PTFE		
Lead chloride		PbCl ₂	✓	✓	✓	✓		
Lead nitrate		Pb(NO ₃) ₂	✓	✓	✓	✓		
Lead sulphate		PbSO ₄	✓	✓	?	✓	Unknown	
Linseed Oil			✓	?	✓	✓	Slow attack	
Lithium Chloride		LiCl	✓	✓	✓	✓		
Magnesium carbonate	Magnesite	MgCO ₃	✓	✓	✓	✓		
Magnesium chloride		MgCl ₂	✓	✓	✓	✓		
Magnesium hydroxide	Brucite	Mg(OH) ₂	✓	✓	?	✓	Potential slow attack	
Magnesium nitrate		Mg(NO ₃) ₂	✓	✓	✓	✓		
Magnesium perchlorate		Mg(ClO ₄) ₂	✓	✓	✓	✓		
Magnesium sulphate	Epsom salts	MgSO ₄	✓	✓	✓	✓		
Maleic acid		C ₄ H ₄ O ₄	✓	✗	✗	✓		
Malic Acid	2-hydroxybutanedioic acid	HO ₂ CCH ₂ CHOHCO ₂ H	✓	✗	✓	✓		
Mercuric chloride	Corrosive Sublimate	HgI ₂	✓	?	?	✓	OK upto 40% at 60 C	
Mercury			✓	✓	✓	✓		
Methanol			✓	✓	✓	✓		
Methyl acetate		CH ₃ COOCH ₃	✓	✗	?	✓	Only use up to 20°C, potential slow attack.	
Methyl alcohol	Methanol / Wood alcohol	CH ₃ OH	✓	✓	✓	✓		
Methyl bromide	Bromethane	CH ₃ Br	✓	✗	✗	✓		
Methyl Chloride			✓	✗	✗	✓		
Methylene bromide	Methylene dibromide / Dibromomethane	CH ₂ Br ₂	✓	✗	✗	✓		
Methylene chloride	Methylene dichloride / Dichloromethane	CH ₂ Cl ₂	✓	✗	✗	✓		
Methyl ethyl ketone	Butanone / Ehtylmethylketone / MEK	CH ₃ C(O)CH ₂ CH ₃	✓	✓	✗	✓		
Methyl ethyl ketone peroxide	2-Butanone Peroxide / M.E.K.P.	C ₈ H ₁₈ O ₆	✓	✗	✗	✓		
Mineral Oil			✓	✗	✗	✓		
Naphthalene	Tar Camphor / Moth Repellant	C ₁₀ H ₈	✓	✗	✗	✓		
Nickel chloride		NiCl ₂	✓	✓	✓	✓		
Nickel nitrate		Ni(NO ₃) ₂	✓	✓	✓	✓		
Nickel sulphate		NiSO ₄	✓	✓	✓	✓		
Nitric acid	Aqua fortis	HNO ₃	✓	?	✗	✓	ok if very dilute	
Nitrobenzene	Mirbane Oil	C ₆ H ₅ NO ₂	✓	✗	✗	✓		
Nitrous acid		HNO ₂	✓	✗	✗	✓		
Oleic acid		C ₁₈ H ₃₄ O ₂	✓	?	✗	✓	Only use up to 20°C, potential slow attack.	
Olive oil			✓	?	✓	✓	Slow attack	
Ortho dichlorobenzene	1,2-Dichlorobenzene	C ₆ H ₄ Cl ₂	✓	✗	✗	✓		
Oxalic acid		H ₂ O ₂ C ₂	✓	?	?	✓	Only use up to 20°C, potential slow attack on NBR	
para-Dichlorobenzene	1-4-Dichlorobenzene	C ₆ H ₄ Cl ₂	✓	✗	✗	✓		
Paraffin	Paraffin oil		✓	✗	?	✓	OK at 20°C, slow attack at 60°C	
Paraldehyde	2,4,6-trimethyl-1,3,5-trioxane	C ₆ H ₁₂ CL ₀₃	✓	✗	✗	✓		
Perchloric Acid	Hyperchloric acid	HClO ₄	✓	?	✗	✓	Potential slow attack	
Petroleum	Gasoline		✓	✗	?	✓	Slow attack, increasing with temperature.	
Phenol	Carbolic acid / hydroxybenzene	C ₆ H ₅ OH	✓	✗	✗	✓		
Phosphoric acid	Orthophosphoric acid	C ₃ O ₈ P	✓	?	✗	✓	OK to 20% conc.	
Picric Acid			✓	✗	✗	✓		
Potassium acetate	Potassium salt / E261	CH ₃ COOK	✓	✓	?	✓	Potential slow attack	
Potassium aluminium sulphate	Alum / Potash alum	KAl(SO ₄) ₂	✓	✓	✓	✓		
Potassium bromide		KBr	✓	✓	✓	✓		
Potassium carbonate	Potash	K ₂ CO ₃	?	✓	✓	✓	Hot, strong solution may attack clay	
Potassium chlorate		KClO ₃	✓	✓	✓	✓		
Potassium chloride		KCl	✓	✓	✓	✓		
Potassium chromate	Dipotassium salt	K ₂ CrO ₄	✓	✓	✓	✓		
Potassium cyanide	Potassium prussate	KCN	?	✓	✓	✓	Hot, strong solution may attack clay	
Potassium dichromate	Potassium bichromate	K ₂ Cr ₂ O ₇	✓	✓	✓	✓		
Potassium ferricyanide	Potassium hexacyanoferrate (III)	K ₃ Fe(CN) ₆	✓	✓	✓	✓		
Potassium ferrocyanide	Potassium Hexacyanoferrate (II)	K ₄ Fe(CN) ₆ ·3H ₂ O	✓	✓	✗	✓		
Potassium fluoride		KF	✓	✓	✗	✓		
Potassium hydroxide	Caustic potash	KOH	?	✓	✓	✓	OK to 6% conc. and 50°C. Potential slow attack above.	
Potassium iodide		KI	✓	✓	✓	✓		
Potassium nitrate	Saltpetre / Nitrate of potash	KNO ₃	✓	✓	✓	✓		
Potassium oxalate		(COOK) ₂	✓	✓	✓	✓		
Potassium perchlorate		KClO ₄	✓	✓	✓	✓		
Potassium permanganate	Permanganate of potash	KMnO ₄	✓	✓	✗	✓		
Potassium sulphate		K ₂ SO ₄	✓	✓	✓	✓		
Potassium Sulphide			✓	✓	✓	✓		
1-Propanol	n-propyl-alcohol / n-Propanol / propan-1-ol	CH ₃ CH ₂ CH ₂ OH	✓	✓	✓	✓		
Propylene Dichloride			✓	✗	✗	✓		
Rapeseed Oil			✓	?	✓	✓	Potential attack	
Sal Ammoniac			✓	✓	✓	✓		
Silver nitrate	Lunar Caustic	AgNO ₃	✓	✓	?	✓	Moderate resistance	
Sodium acetate		CH ₃ COONa	✓	✓	?	✓	Potential slow attack	

Key to use

✓	Excellent for use
?	See comments & check suitability with Naylor
✗	Unsatisfactory for use

Coupler Types

PP / EPDM	High Grade Polypropylene casing with EPDM rubber seal
PP / NBR	High Grade Polypropylene casing with Nitrile rubber seal.
FEP / PTFE	Fluoropolymer Liner with band seal coupling and PTFE seals

If you need information on any chemicals that don't appear on the list or require clarification on any conditions please contact Naylor's technical Thermachem team on +44 (0) 1226 794056 or thermachem@naylor.co.uk

This table is intended as a guide for use by specifiers and contractors and is based on research of openly available data undertaken by Naylor. It has been compiled with great care but it is recommended that anyone using the table checks material suitability with another source to cover for any potential errors. As Naylor cannot be aware of site conditions and actual chemicals discharged Naylor can not provide any warranties against chemical attack. If you do find anything wrong with this table please let us know and we'll put it right.

Chemical / Substance	Alternative Name(s)	Chemical or Molecular Formula (if relevant)	Thermachem	Coupler - Case/Seal material			Condition of use if ? Naylor for clarification of conditions)	(Contact
				PP / EPDM	PP / NBR	FEP / PTFE		
Sodium Bicarbonate	Bicarbonate of Soda / Baking soda	NaHCO ₃	✓	✓	✓	✓		
Sodium Bisulphate			✓	✓	?	✓		
Sodium Bisulphite			✓	✓	✓	✓		
Sodium bromide		NaBr	✓	✓	?	✓	OK to 20°C	
Sodium carbonate	Washing soda	Na ₂ CO ₃	✓	✓	✓	✓		
Sodium chlorate		NaClO ₃	✓	✓	✓	✓		
Sodium chloride	Common salt	NaCl	✓	✓	✓	✓		
Sodium cyanide		NaCN	?	✓	✓	✓	Hot, strong solution may attack clay	
Sodium dihydrogen phosphate	Monosodium phosphate	NaH ₂ PO ₄	✓	✓	✓	✓		
Sodium Fluoride			?	✓	✓	✓		
Sodium hydroxide	Caustic soda	NaOH	?	✓	?	✓	Thermachem OK if cold and up to 4% / NBR slowly attacked.	
Sodium hypochlorite	Bleach	NaClO	✓	?	?	✓	Attacked by strong solutions	
Sodium nitrate	Chile saltpetre	NaNO ₃	✓	✓	?	✓	Potential slow attack	
Sodium Silicate	Waterglass / Sodium metasilicate	Na ₂ SiO ₃	?	✓	✓	✓	Hot, strong solution may attack clay	
Sodium Sulphate	Thenardite	Na ₂ SO ₄	✓	✓	✓	✓		
Sodium sulphide		Na ₂ S	✓	✓	✓	✓		
Sodium Sulphite			✓	✓	✓	✓		
Sodium thiosulphate	Sodium Hyposulphite, Hypo	Na ₂ S ₂ O ₃	✓	✓	?	✓	Potential slow attack	
Soya oil			✓	✗	✓	✓		
Stannic Chloride	Tin (IV) chloride	SnCl ₄	✓	✗	✓	✓		
Stannous Chloride	Tin (II) chloride	SnCl ₂	✓	✗	✓	✓		
Styrene	Vinylbenzene	C ₆ H ₅ CH=CH ₂	✓	✗	✗	✓		
Sulphur Chloride			✓	✗	✗	✓		
Sulphuric acid	Oil of Vitriol	H ₂ SO ₄	✓	?	✗	✓	Up to 50% concentration OK if 20°C or below.	
Sulphurous acid		H ₂ SO ₃	✓	?	?	✓	Potential slow attack	
Tannic acid	Tannin	C ₇₆ H ₅₂ O ₄₆	✓	✓	✓	✓		
Toluene	Methylbenzene	C ₆ H ₅ CH ₃	✓	✗	✗	✓		
Transformer oil			✓	✗	?	✓	OK to 20°C	
Transmission fluid			✓	✗	?	✓	Potential slow attack at 60	
Triammonium phosphate	Ammonium phosphate	(NH ₄) ₃ PO ₄	✓	✓	✓	✓		
Trichloroacetic Acid		CCl ₃ COOH	✓	?	?	✓	Only use below 2% conc. at 20°C or lower, still slow attack.	
1,1,1-Trichloroethane	Methyl chloroform	CH ₂ CCl ₃	✓	✗	✗	✓		
Trichloroethylene		C ₂ HCl ₃	✓	✗	✗	✓		
1,2,4-Trichlorobenzene		C ₆ H ₃ Cl ₃	✓	✗	✗	✓		
2,4,6-Trichlorophenol		C ₆ H ₂ Cl ₃ OH	✓	✗	✗	✓		
Trisodium phosphate	Sodium Phosphate	Na ₃ PO ₄	✓	✓	✓	✓		
Turpentine	Pine Oil	C ₁₀ H ₁₆	✓	✗	✗	✓		
Urea	Carbamide	CO(NH ₂) ₂	✓	✗	✓	✓		
Uric acid		C ₅ H ₄ N ₄ O ₃	✓	?	?	✓	Unknown	
White spirit	Turpentine substitutes		✓	✗	✗	✓		
Xylene (ortho-, meta- and para-)	Dimethyl benzene	C ₆ H ₄ (CH ₃) ₂	✓	✗	✗	✓		
Zinc chloride		ZnCl ₂	✓	✓	✓	✓		
Zinc nitrate		Zn(NO ₃) ₂	✓	✓	✓	✓		
Zinc sulphate	White vitriol	ZnSO ₄	✓	✓	✓	✓		