

HTA specification guide

Chemical resistance

Any fluid containing solutions or chemical agents, or in different quantities than those permitted by the standards and regulations concerning drinking water, shall be considered as chemical products.

It is therefore necessary to check the compatibility of chemical products with HTA. Please refer to the below data. If in doubt, it is advisable to consult both the supplier of the product and Aliaxis UK technical services.

Substance	Concentration	PVCC			EPDM		"Viton" seal	FPM
		20°C	60°C	80°C	20°C	60°C	20°C	60°C
acetaldehyde		0	0	0	-	-	-	-
Acetic acid	0 - 20 %	2	2	2	2	-	2	-
Acetic acid	20 - 30 %	2	-	0	-	-	2	-
Acetic acid	30 - 60 %	2	-	0	-	-	-	-
Acetic acid	80 - 100 %	2	-	0	-	-	0	0
Acetic anhydride		0	0	0	-	-	-	-
acetone		0	0	0	-	-	-	-
acetylene		2	2	-	2	-	2	-
Acid ore washing water		2	2	2	-	-	2	-
Adipic acid		2	2	2	2	2	2	2
Allyl alcohol	96%	2	-	-	-	-	-	0
Allyl chloride		0	0	0	-	-	-	-
alum		2	2	2	2	2	2	2
Aluminum nitrate		2	2	2	-	-	2	2
Aluminum sulphate		2	2	2	2	2	2	2
Aluminum chloride		2	2	2	2	2	2	2
Aluminum fluoride		2	2	2	2	-	2	-
Aluminum hydroxide		2	2	2	-	-	-	-
Aluminum oxychloride		2	2	2	-	-	-	-
Amides		0	0	0	-	-	-	-
Amines		0	0	0	-	-	-	-
Ammonium bifluoride		2	2	2	-	-	2	0
Ammonium carbonate		2	2	2	2	2	2	2
Ammonium chloride		2	2	2	2	2	2	2
Ammonium fluoride		2	-	-	2	2	2	-
Ammonium hydroxide		0	0	0	-	-	-	-
Ammonium methaphosphate		2	2	2	-	-	2	-
Ammonium nitrate		2	2	2	2	2	2	2
Ammonium persulfate		2	2	2	-	-	2	2
Ammonium phosphate (ammoniacal and neutral)		2	-	-	2	2	2	2
Ammonium sulphate		2	2	2	2	2	2	2
Ammonium sulphite		2	2	2	-	-	2	2
Ammonium thiocyanate		2	2	2	-	-	-	-
Amyl acetate		0	0	0	-	-	-	-

Substance	Concentration	PVCC			EPDM		"Viton" seal	FPM
		20°C	60°C	80°C	20°C	60°C	20°C	60°C
Amyl alcohol		2	-	-	2	2	-	-
Amyl chloride		0	0	0	-	-	2	-
Anhydrous nitric acid		0	0	0	-	-	-	-
aniline		0	0	0	-	-	-	-
Aniline chlorate		2	0	0	-	-	-	-
Aniline hydrochloride		0	0	0	-	-	-	0
anthraquinone		2	-	-	-	-	2	2
Antimony trichloride		2	2	2	2	2	2	2
Arsenic acid	80%	2	2	2	2	2	2	2
asphalt		2	2	2	0	-	-	-
Barium chloride		2	2	2	2	2	2	2
Barium hydroxide		2	2	2	2	2	-	-
Barium sulphate		2	2	2	2	2	2	2
Barium carbonate		2	2	2	-	-	2	2
Barium sulphite		2	2	2	-	-	2	2
Beer		2	2	2	2	-	2	2
Beetroot (sweet liqueur)		2	2	2	-	-	2	2
benzaldehyde		0	0	0	-	-	-	-
benzene		0	0	0	-	-	-	-
Benzoic acid		2	0	0	2	2	2	2
benzol		0	0	0	-	-	-	-
Bismuth carbonate		2	2	2	-	-	2	2
borax		2	2	2	2	2	2	2
Boric acid		2	2	2	2	2	2	2
Boron trifluoride		2	2	2	-	-	-	-
brine		2	2	2	2	2	2	2
Bromine water		2	2	2	-	-	-	-
Butadiene		2	2	2	0	0	2	2
Butyl acetate		0	0	0	-	-	-	-
Butyl alcohol		2	-	-	2	2	2	2
Butylene		2	-	-	2	-	-	-
Butylphenol		2	0	0	-	0	-	-
Butynediol (erthriol)		2	0	0	2	-	2	-
Calcium sulphate		2	2	2	2	2	2	2
Calcium bisulphite		2	2	2	-	-	2	2
Calcium carbonate		2	2	2	-	-	2	2
Calcium chlorate		2	2	2	-	-	2	-
Calcium chloride		2	2	2	2	2	2	2
Calcium hydroxide		2	2	2	-	-	-	-
Calcium hypochlorite		2	2	2	2	2	2	2
Calcium nitrate		2	2	2	2	2	2	2
Cane sugar molasses		2	2	2	-	-	-	-
Carbon dioxide in aqueous solution		2	2	2	2	-	2	-

Substance	Concentration	PVCC			EPDM		"Viton" seal	FPM
		20°C	60°C	80°C	20°C	60°C	20°C	60°C
Carbonic acid		2	2	2	2	2	2	2
Castor oil		0	0	0	-	-	2	2
Caustic potash		2	2	2	2	2	-	0
Caustic soda		2	2	2	2	2	-	0
Cellosolve		2	-	-	-	-	0	0
Chloracetic acid		2	-	-	-	-	-	0
Chloral hydrate		2	2	2	-	-	0	-
Chlorine dioxide (see fact sheet 12)		2	2	-	-	-	-	-
Chlorine water	5%	2	2	2	2	-	-	-
Chlorobenzene		0	0	0	-	-	-	-
chloroform		0	0	0	-	-	-	-
Chlorosulfonic acid	100%	2	-	-	-	-	0	0
Chromic acid	10%	2	2	2	-	-	2	2
Chromic acid	30%	2	-	-	-	-	2	2
Chromic acid	40%	2	-	-	-	-	2	2
Chromic acid	50%	2	-	-	-	-	2	2
Chromium alum		2	2	2	2	2	2	2
Citric acid	20%	2	2	0	2	2	2	2
Cooking oils		2	2	2	-	-	2	2
Copper sulphate		2	2	2	2	2	2	2
Copper cyanide		2	2	2	2	-	2	2
Copper chloride		2	2	2	2	2	2	2
Copper fluoride		2	2	2	2	-	2	-
Copper nitrate		2	2	2	2	2	2	2
Cottonseed oil		2	2	2	-	-	2	-
cresol	90%	2	0	0	-	-	2	-
Crude acid oil		2	2	2	-	-	-	-
Cyclohexanol		0	0	0	-	-	-	-
Cyclohexanone		0	0	0	-	-	-	-
Delight water		2	2	2	0	-	-	-
Demineralized water		2	2	2	2	2	2	2
Dextrin	18%	2	2	2	2	2	2	2
dextrose		2	2	2	-	-	2	2
Diazotation salts		2	2	2	-	-	-	-
Dichloroethylene		0	0	0	-	-	-	-
Diglycolic acid	30%	2	2	2	2	-	2	2
Dimethylamine		0	0	0	-	-	-	-
Diethyl phthalate		0	0	0	-	-	-	-
Disodium phosphate		2	2	2	-	-	2	2
Distilled water		2	2	2	2	2	2	2
Esters (all)		0	0	0	-	-	-	-
Ethers		0	0	0	-	-	-	-
Ethoxyl		0	0	0	-	-	-	-

Substance	Concentration	PVCC			EPDM		"Viton" seal	FPM
		20°C	60°C	80°C	20°C	60°C	20°C	60°C
Ethyl alcohol	5%	2	2	2	2	2	2	0
Ethyl acetate		0	0	0	-	-	-	-
Ethyl acrylate		0	0	0	-	-	-	-
Ethyl chloride		0	0	0	-	-	-	-
Ethyl ether		0	0	0	-	-	-	-
Ethylene bromide		0	0	0	-	-	-	-
Ethylene chlorhydrin		0	0	0	-	-	-	-
Fatty acids		2	2	2	-	-	2	2
Ferric chloride		2	2	2	2	2	2	2
Ferric nitrate		2	2	2	2	2	2	2
Ferric sulphate		2	2	2	2	2	2	2
Ferrous chloride		2	2	2	2	2	2	2
Ferrous sulphate		2	2	2	2	2	2	2
Fluoboric acid		2	2	2	-	-	-	-
Fluosilicic acid		2	2	2	-	-	-	0
formaldehyde		0	0	0	2	2	-	-
Formic acid		2	0	0	2	2	2	0
Foundry core oil		2	2	2	-	-	-	-
Freshwater		2	2	2	2	2	2	2
fructose		2	2	2	-	-	2	2
Furfurol		0	0	0	-	-	-	-
Gallic acid		2	2	2	-	-	2	2
gelatin		2	2	2	2	-	2	2
Glacial acetic acid		2	0	0	-	-	0	0
glucose		2	2	2	2	2	2	2
glycerine		2	2	2	2	2	2	2
Glycolic acid		2	2	2	2	-	2	2
hexane		2	-	-	-	-	2	2
Hydrobromic acid	10%	2	2	2	2	2	2	2
Hydrochloric acid	20%	2	2	2	2	2	2	2
Hydrochloric acid	0 - 25 %	2	2	2	2	2	2	2
Hydrochloric acid	25 - 40 %	2	2	2	-	-	2	-
Hydrocyanic acid		2	2	2	-	-	2	2
Hydrofluoric acid	40%	2	2	2	-	0	2	2
Hydrofluoric acid	60%	2	0	0	-	0	2	-
Hydrofluosilicic acid		2	2	-	-	-	2	0
Hydrogen peroxide mixed with silver		2	2	-	-	-	-	-
Hydrogen phosphid		2	2	2	-	-	-	-
Hydroquinone		2	2	2	-	-	2	-
Hydroxylaminesulfate 12%		2	2	2	2	2	2	-
Hypochlorous acid		2	2	2	-	-	2	2
kerosene		2	2	2	-	0	2	2
Know		2	2	2	2	2	-	-

Substance	Concentration	PVCC			EPDM		"Viton" seal	FPM
		20°C	60°C	80°C	20°C	60°C	20°C	60°C
Lactic acid	28%	2	2	-	-	-	2	2
Lauric acid		2	2	2	-	-	-	-
Lauryl sulfate		2	2	2	-	-	-	-
Lauryl chloride		2	2	2	-	-	-	-
Lead acetate		2	2	2	2	2	-	-
Lime sulfide		2	2	2	2	-	-	-
Linoleic acid		2	2	2	-	-	2	2
Linseed oil		0	0	0	-	-	2	2
Liquid bromine		0	0	0	-	-	-	-
Liquid phosgene		0	0	0	-	-	-	-
Lubricating oil		2	2	2	-	-	2	-
Magnesium sulphate		2	2	2	2	2	2	2
Magnesium carbonate		2	2	2	-	-	2	2
Magnesium chloride		2	2	2	2	2	2	2
Magnesium hydroxide		2	2	2	-	-	-	-
Magnesium nitrate		2	2	2	2	2	-	-
Maleic acid	35%	2	2	2	2	2	2	2
Malic acid		2	2	2	2	-	2	2
Mercahenzothiazolate		0	0	0	-	-	-	-
Mercuric chloride		2	2	2	2	2	2	2
Mercuric cyanide		2	2	2	2	-	2	2
mercury		2	2	2	2	2	2	2
Mercury nitrate		2	2	2	2	2	-	-
Methyl chloride		0	0	0	-	-	-	-
Methyl sulphate		2	2	2	-	-	-	-
Methyl alcohol	10%	2	2	2	2	2	2	0
Methyl ethyl ketone		0	0	0	-	-	-	-
Methylene chloride		0	0	0	-	-	-	-
milk		2	2	2	2	-	2	2
Mineral oil		2	2	2	-	-	2	2
Molasses		2	2	2	2	2	2	2
Monochloramine		2	2	-	-	-	-	-
Monoethylene glycol		2	2	2	-	-	-	-
Monopropylene glycol		0	0	0	-	-	-	-
naphtha		2	2	2	-	-	2	2
naphthalene		0	0	0	-	-	-	-
Nickel sulphate		2	2	2	2	2	2	2
Nickel chloride		2	2	2	2	2	2	2
Nickel nitrate		2	2	2	2	2	2	2
nicotine		2	2	2	2	-	2	2
Nicotine acid		2	2	2	-	-	-	-
Nitric acid	30 - 50 %	2	-	-	-	-	2	-
Nitric acid	50 - 60 %	2	0	0	0	0	-	0

Substance	Concentration	PVCC			EPDM		"Viton" seal	FPM
		20°C	60°C	80°C	20°C	60°C	20°C	60°C
Nitric acid	60%	2	0	0	0	0	0	0
Nitric acid	68%	2	0	0	0	0	0	0
Nitrobenzene		0	0	0	-	-	-	-
Ocenol (Unsaturated alcohol)		2	2	2	-	-	-	-
Oleic acid		2	2	2	-	0	2	2
Oleum		0	0	0	-	-	-	-
Oxalic acid		2	2	-	2	2	2	2
Oxygenated water	30%	2	2	2	-	-	2	2
Oxygenated water	50%	2	2	2	-	-	2	-
Oxygenated water	90%	2	2	2	-	-	-	-
Palmitic acid	100%	2	2	2	-	-	2	2
Peracetic acid mixed with H2O2		2	2	-	-	-	-	-
Perchloric acid	10%	2	-	-	2	2	2	2
Perchloric acid	70%	2	0	0	2	2	2	2
phenol		2	-	-	0	0	-	-
Phenylhydrazine		0	0	0	-	-	-	-
Phenylhydrazine hydrochloride		2	0	0	2	-	-	-
Phosgene gas 100%		2	-	-	2	2	-	-
Phosphoric acid	0 - 25 %	2	2	2	2	2	2	2
Phosphoric acid	25 - 50 %	2	2	2	2	2	2	2
Phosphoric acid	50 - 85 %	2	2	2	2	-	2	2
Phosphorus trichloride		0	0	0	-	-	-	-
Phosphorus pentoxide		2	-	-	2	2	2	2
Photographic baths		2	2	2	2	2	2	2
Picric acid	1%	0	0	0	2	-	2	2
Potassium bicarbonate		2	2	2	2	2	2	2
Potassium bichromate		2	2	2	2	-	2	-
Potassium borate		2	2	2	2	2	2	2
Potassium bromate		2	2	2	2	2	2	2
Potassium bromide		2	2	2	2	2	2	2
Potassium carbonate		2	2	2	2	-	2	2
Potassium chlorate		2	2	2	2	2	2	2
Potassium chloride		2	2	2	2	2	2	2
Potassium chromate		2	2	2	2	-	2	-
Potassium cyanide		2	2	2	2	-	2	2
Potassium dichromate		2	2	2	-	-	2	-
Potassium ferricyanide		2	2	2	2	2	2	2
Potassium ferrocyanide		2	2	2	2	2	2	2
Potassium fluoride		2	2	2	2	-	2	-
Potassium hydroxide		2	2	2	-	-	-	-
Potassium nitrate		2	2	2	2	2	2	2
Potassium perborate		2	2	2	-	-	-	-
Nitric acid	50 - 60 %	2	0	0	0	0	-	0

Substance	Concentration	PVCC			EPDM		"Viton" seal	FPM
		20°C	60°C	80°C	20°C	60°C	20°C	60°C
Potassium perchlorate	1%	2	2	2	2	2	2	2
Potassium permanganate 10%		2	2	2	2	2	2	2
Potassium persulfate		2	2	2	2	2	2	2
Potassium sulphate		2	2	2	2	2	2	2
Primary Butanol		2	-	-	2	2	2	2
Propargylic alcohol		2	2	2	2	2	-	-
Propyl alcohol	1%	2	2	2	2	2	2	2
Propylene dichloride		0	0	0	-	-	-	-
Pulp and fruit juices		2	2	2	-	-	2	2
Rayon coagulation bath		2	2	2	-	-	-	-
Salt water		2	2	2	2	2	2	2
Secondary Butanol		2	0	0	2	2	2	2
Selenic acid		2	-	-	-	-	-	-
Silicic acid		2	2	-	2	2	2	2
Silver cyanide		2	2	2	2	-	2	2
Silver nitrate		2	2	2	2	2	2	2
Silvering solutions		2	2	2	-	-	-	-
Sodium acetate		2	2	2	-	-	-	-
Sodium sulphate		2	2	2	2	2	2	2
Sodium acid phosphate		2	2	2	2	2	2	2
Sodium arsenat		2	2	2	-	-	2	2
Sodium benzoate		2	2	2	2	2	2	2
Sodium bicarbonate	36%	2	2	2	2	2	2	2
Sodium bisulfate		2	2	2	-	-	-	-
Sodium bisulphite		2	2	2	2	2	2	2
Sodium bromide		2	2	2	-	-	2	2
Sodium carbonate		2	2	2	2	2	2	2
Sodium chlorate		2	2	2	2	2	2	2
Sodium chloride		2	2	2	2	2	2	2
Sodium cyanide		2	2	2	2	-	2	2
Sodium dichromate		2	2	2	-	-	2	-
Sodium ferricyanide		2	2	2	2	2	2	2
Sodium ferrocyanide		2	2	2	2	2	2	2
Sodium fluoride		2	2	2	2	-	2	-
Sodium hydroxide		2	2	2	2	2	-	0
Sodium hypochlorite		2	2	2	2	-	2	2
Sodium nitrate		2	2	2	2	2	2	2
Sodium nitrite		2	2	2	2	2	2	-
Sodium silicate		2	2	2	2	2	2	2
Sodium sulfide		2	2	2	2	2	0	0
Sodium sulphite		2	2	2	-	-	2	2
Potassium perborate		2	2	2	-	-	-	-
Nitric acid	50 - 60 %	2	0	0	0	0	-	0

Substance	Concentration	PVCC			EPDM		"Viton" seal	FPM
		20°C	60°C	80°C	20°C	60°C	20°C	60°C
Sodium thiosulfate (or hypo)		2	2	2	2	2	2	2
Stannic chloride		2	2	2	2	2	2	2
Stannous chloride		2	2	2	2	2	2	2
Stearic acid		2	2	2	2	2	2	2
Stoddard solvent		2	2	2	-	-	-	-
sulphur		2	2	2	2	2	2	2
Sulphur dioxide		2	2	2	-	-	0	-
Sulphur dioxide		2	0	0	-	-	0	-
Sulphuric acid	0 - 40 %	2	2	2	2	2	2	2
Sulphuric acid	40 - 80 %	2	2	0	2	-	2	2
Sulphuric acid	80 - 90 %	2	0	0	0	0	2	2
Sulphuric acid	95%	2	0	0	0	0	-	0
Sulphurous acid		2	0	0	-	-	2	2
Sweet crude oil		2	2	2	-	-	-	-
Tannic acid		2	2	2	-	-	2	2
Tartaric acid		2	2	2	2	-	2	2
Tertiary hexanol		2	2	2	2	-	-	-
Tetraethyl lead		2	2	2	-	-	-	-
Tetrahydrofuran		0	0	0	-	-	-	-
Thionyl chloride		0	0	0	-	-	-	-
Titanium tetrachloride		2	0	0	0	0	-	-
Toluol or toluene		0	0	0	-	-	-	-
Tributyl phosphate		0	0	0	-	-	-	-
trichloroethylene		0	0	0	-	-	2	-
Tricresylphosphate		0	0	0	-	-	-	-
Triethanolamine		0	0	0	-	-	-	-
Triethylamine		2	2	-	-	-	2	2
Trimethylolpropane	10%	2	2	2	2	2	2	2
Trisodium phosphate		2	2	2	-	-	2	2
urea	30%	2	0	0	2	2	2	2
urine		2	2	2	2	2	2	2
vinegar		2	2	2	2	2	-	-
Vinyl acetate		0	0	0	-	-	-	-
whisky		2	2	2	2	-	2	2
Wines		2	2	2	2	-	2	2
Xylene or Xylol		0	0	0	-	-	-	-
Zinc sulphate		2	2	2	2	2	2	2
Zinc chloride		2	2	2	2	2	2	2
Zinc chromate		2	2	2	2	-	2	-
Zinc cyanide		2	2	2	2	-	2	2
Zinc nitrate		2	2	2	2	2	2	2
Potassium perborate		2	2	2	-	-	-	-
Nitric acid	50 - 60 %	2	0	0	0	0	-	0