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The corrosion resistance of the materials used to make the sump and their compatibility with the substances stored, are as follows. Many chemical substances can be stored using a steel sump (1.0038). Synthetic sumps (made from polyethylene) are often required when storing corrosive substances (acids / alkalis). Stainless steel offers the utmost protection against many aggressive flammable liquids. If your requirements are not included in the resistance list then the sump can be made from the same material as your storage container in which your chemical is delivered.

Chemical stored	Concentration	Steel 1.1.41	S-Steel 21	PE 31
Acetaldehyde	≤ 40%		•	
Acetaldehyde	max. poss.		•	
Acetic acid			•	
Acetone		•	•	
Adhesives		•	•	
Aircraft turbine fuel		•	•	
Alcohol		•	•	
Ammonium hydroxide	≤ 30%		•	•
Ammonium nitrate	saturated		•	•
Ammonium solution				•
Anti-freeze (car)			•	•
Battery acid	≤ 38%			•
Benzene		•	•	
Benzoic acid			•	•
Bio-Diesel		•	•	
Boric acid	≤ 10%		•	•
Brake fluid		•	•	•
Bromine		•		
Butanoic acid			•	
Butanol	max. poss.	•	•	
Calcium acetate	aqueous		•	•
Calcium chlorate, aqueous solution	≤ 65%		•	•
Calcium hydroxide			•	•
Calcium hypochlorite	saturated			•
Chlorobenzene		•		
Chloric acid	≤ 20%			•
Chlorine	≤ 97%		•	
Chloroacetic acid	≤ 50%			•
Chromic acid	≤ 20%		•	•
Citric acid	≤ 10%		•	•
Crude oil		•	•	
Dichlorethylene	max. poss.		•	
Dichlormethane		•		
Diesel fuel		•	•	
Ether		•	•	
Ethyl acetate		•	•	
Ethyl chloride		•		
Ethylene glycol		•	•	
Ferric (II) sulphate	saturated		•	•
Ferric (III) chloride	saturated			•
Ferric (III) sulphate	saturated		•	•
Formic acid			•	
Fuel		•	•	
Gearbox oil, (Hypoid), 110°C		•	•	
Glycerol			•	•
Glycolic acid	≤ 37%		•	
Glycolic acid	≤ 70%		•	
Heated steam motor oil, odour free		•	•	•
Heating oil		•	•	
Hydrazine	≤ 10%		•	
Hydrazine hydrate	aqueous		•	•
Hydrochloric acid	concentrated		•	
Hydrogen cyanide			•	•
Hydrogen peroxide	≤ 60%		•	•
Isobutanol		•	•	
Isobutyl acetate		•	•	
Isobutyl chloride		•		
Isobutyl ether		•	•	

Chemical stored	Concentration	Steel 1.1.41	S-Steel 21	PE 31
Iso-hexane		•	•	
Iso-pentane		•	•	
Isopropyl alcohol (Isopropanol)		•	•	
Kerosene		•	•	
Magnesium carbonate	saturated		•	•
Magnesium chloride	aqueous		•	•
Magnesium nitrate	saturated		•	•
Magnesium sulphate			•	•
Menthol	solid		•	
Methanol		•	•	
Methyl acetate		•	•	
Methyl acrylate			•	
Methyl alcohol			•	
Methyl chloride		•		
Motor fuel		•	•	
Nitric acid	≤ 10%		•	•
Nitrobenzene		•	•	
Nitro methane		•	•	
Oil		•	•	•
Oleic acid	max. poss.		•	•
Pentanol		•	•	
Petroleum	max. poss.		•	•
Petroleum spirit		•	•	
Phenol	100%	•	•	
Phosphoric acid	≤ 5%		•	•
Potassium carbonate			•	•
Potassium chlorate			•	
Potassium chloride	aqueous		•	•
Potassium chloride	≤ saturated sol.			•
Potassium hydroxide, aqueous sol.	50%	•	•	•
Potassium nitrate	50%		•	•
Potassium nitrate	≤ saturated sol.			•
Potassium phosphate	≤ saturated sol.			•
Potassium sulphate	≤ saturated sol.			•
Propanol		•	•	
Propionic acid			•	•
Salicylic acid	saturated		•	•
Silicic acid			•	•
Sodium acetate			•	•
Sodium bisulphate			•	•
Sodium bisulphite	aqueous		•	•
Sodium carbonate			•	•
Sodium chloride			•	•
Sodium hydrogen sulphate	≤ saturated sol.			•
Sodium hydrogen sulphide, aqu. sol.	30%	•	•	
Sodium hydrogen sulphite	≤ saturated sol.			•
Sodium hydroxide, aqueous sol.	50%	•	•	•
Sodium hypochlorite solution	≤ saturated sol.		•	
Sodium sulphate				•
Sodium sulphide	≤ saturated sol.			•
Spirits of turpentine		•	•	
Sulphuric acid	≤ 78%			•
Sulphuric acid	95%		•	
Sulphurous acid	saturated		•	•
Toluene		•		
Urea			•	•
Uric acid			•	•
Xylene		•	•	

1) **Painted** (WN 1.0038) or **galvanized** (1.0242) **steel**

2) **Stainless steel** 1.4301 (V2A)

3) **Polyethylene** (PE)

4) **Galvanized** sumps are not suitable for the storage of the following liquids: organic and inorganic acids, sodium bicarbonate, caustic potassium carbonate solution as well as other alkali hydroxides, chlorinated hydrocarbons, amine, nitro compounds, acid chlorides and other chlorides, phenol, aqueous alkaline solutions, nitrile.