

Sodium hypochlorite (NaOCl)

Sodium hypochlorite is a clear, slightly yellowish solution with a distinct odor. It is produced by reacting chlorine with a solution of sodium hydroxide. Sodium hypochlorite is widely used for its disinfecting and oxidizing properties.

Concentration
8%-16%

Molecular weight
74.44

Molecular formula
NaOCl

Characteristics

Density	1.207-1.230 g/cm ³
Density (vacuum), 20°C	1.207 - 1.230 kg/l
Dynamic viscosity, 25°C	2.6 mPa.s
Explosion limits in air, 1013 mbar	non-explosive % v/v
Flash point in air, 1013 mbar	non-inflammable °C
Heat capacity, 20°C	3.5 J/g.K
PH	>12
Solubility in water, 20°C	Soluble in all ratios
Specific conductance (free from traces of water or ethanol), 25°C	0.23 S/cm
Vapor pressure, 20°C	2.5 kPa

Applications

Sodium hypochlorite is generally used as bleached in some of the following applications: Drinking-, process-, cooling- and swimming water, household and industrial cleaning, starch modification and the chemical industry.

Storage

Sodium hypochlorite is highly corrosive. To prevent damage to installations, contact with metal pipes, valves, meters, etc. must be strictly avoided. Sodium hypochlorite should not be stored at higher temperatures as this increase the rate of decomposition. Product should not come in contact with acids because of the formation of chlorine gas.

Packaging and transport

Sodium hypochlorite is dispatched in bulk by road trailers. The actual Full Truck Load (FTL) is geospecific and can therefore differ due to local regulations and legislation.

Safety and handling

Sodium hypochlorite is a strong base and oxidizing agent. Please note that sodium hypochlorite can cause damage to the eyes, the skin and gastrointestinal tract. Sodium hypochlorite reacts with hydrochloric acid forming toxic chlorine gas.