

Caustic Soda (45 %)

VESTOLIT Base Chemicals

Caustic soda is a clear, colorless solution of sodium hydroxide in water. The solution is highly alkaline, highly corrosive and aggressive on a range of materials such as aluminium, magnesium, zinc, glass, enamel and many plastic materials. Caustic soda is approved in the EU as food additive under E 524.

Our caustic soda fulfils the purity criteria for food additives in accordance with the Additive Registration Ordinance (additives authorized), regulation (EU) No. 231/2012, Food Chemicals Codex (FCC) and DIN EN 896 (products for the treatment of water for human use).

Classification

- Sodium Hydroxide Solution (NaOH 45 %) Membrane Process
- Caustic Soda Solution
- CAS-No. 1310-73-2 (NaOH)
- Molar mass: 39.997 g/mol

Applications

- Aluminium industry
- Chemical industry
- Desulphurisation
- Food industry
- Glass & Glass fibres
- Mineral oil industry
- Pulp and paper industry
- Soaps, surfactants, and cleaning agents
- Textile industry, rayon & staple fibres
- Water treatment

Delivery data

Properties	Method ¹⁾	Unit	Value
Total alkalinity as NaOH	DIN EN ISO 896	% (m)	44.0-46.0
Sodium carbonate (Na ₂ CO ₃)	DIN EN ISO 9963-2	% (m)	≤ 0.1
Chloride (Cl ⁻)	DIN EN ISO 10304	mg/kg	≤ 50
Sulphate (SO ₄ ²⁻)	DIN EN ISO 10304	mg/kg	≤ 40
Chlorate (ClO ₃ ⁻)	DIN EN ISO 10304	mg/kg	≤ 10
Iron (Fe)	DIN EN ISO 11885	mg/kg	≤ 3
Silicon (Si)	DIN EN ISO 11885	mg/kg	≤ 5
Calcium (Ca)	DIN EN ISO 11885	mg/kg	≤ 5
Aluminium (Al)	DIN EN ISO 11885	mg/kg	≤ 0.5
Lead (Pb)	DIN EN ISO 11885	mg/kg	≤ 0.2
Cadmium (Cd)	DIN EN ISO 11885	mg/kg	≤ 0.1
Chrome (Cr)	DIN EN ISO 11885	mg/kg	≤ 0.3
Copper (Cu)	DIN EN ISO 11885	mg/kg	≤ 0.1
Cobalt (Co)	DIN EN ISO 11885	mg/kg	≤ 0,1
Manganese (Mn)	DIN EN ISO 11885	mg/kg	≤ 0.1
Nickel (Ni)	DIN EN ISO 11885	mg/kg	≤ 0.5
Zinc (Zn)	DIN EN ISO 11885	mg/kg	≤ 0.2

¹⁾ based on the standard which are in force

Physical Data (Literature information)

Characterisation	Concentration	Unit	Value
Density at 20 °C	45 %	kg/m ³	1,479
Dynamic viscosity at 20 °C	45 %	mPa s	55
Dynamic viscosity at 50 °C	45 %	mPa s	11
Melting point	45 %	°C	7
Boiling temperature	45 %	°C	136
Specific heat at 20 °C	45 %	J/(kg K)	3,340
Specific heat at 50 °C	45 %	J/(kg K)	3,350

Safety and transport information and toxicologic data are included in our actual material safety data sheet (MSDS).

For further information and advice, please contact our technical service at Customer-Service.Europe@vestolit.com or our representatives.