

# LIQUID CAUSTIC SODA 50%

## PDS-1110-1101

Liquid caustic soda is manufactured by electrolysis of purified and concentrated brine using mercury, diaphragm or membrane cell technology as follows:



Liquid caustic soda is a colourless odourless liquid. Liquid caustic soda is a strong base used as a chemical reagent, pH-regulating, ion exchanger regenerating agent, catalyst, etching or cleaning agent.

*Some applications of this product may be regulated or restricted by national or international standards (e.g. for food additives, water treatment, the pharmaceutical industry, etc). The buyer and the eventual user, in his sole and entire liability, shall respect those standards, orders of any relevant authority, and all existing patents and intellectual properties rights; and shall comply with the laws and the regulations applicable to our products and/or to his activity. The buyer and the eventual user must independently determine the suitability of this product for any particular purpose and its manner of use.*

*Please contact us for further information on grades developed for a specific end-use.*

## Plants

Jemeppe, (Belgium), Lillo (Belgium), Rheinberg (Germany), Martorell (Spain), Torrelavega (Spain), Tavaux (France), Bussi (Italy), Rosignano (Italy), Póvoa de Santa Iria (Portugal).

### Storage Plants

Bad Zurzach (Switzerland), Saint-Herblain (France), Eastham (Great-Britain), Tavazzano (Italy), Aveiro (Portugal), Setubal (Portugal).

## Standard specification

### Product characteristics

Content	Unit	Value <sup>(1)</sup>	Method of analysis <sup>(2)</sup>
Total alkalinity (NaOH)	g/kg	500 ± 5	Titrimetry (ISO 979)
Sodium carbonate (Na <sub>2</sub> CO <sub>3</sub> )	g/kg	≤ 0,4	Titrimetry (ISO 3196)
Heavy metals* (Pb) (* ) H <sub>2</sub> S Group	mg/kg	≤ 10	ICP-AES** (ISO 11885) or precipitation test (ANA-1110-0002) (**) Inductively coupled plasma atomic emission spectroscopy

(1) The values are expressed per kg of solution as such.

(2) The product is analysed with the mentioned methods or with local methods depending on laboratory equipments.

### Packaging characteristics

Bulk.

*Please contact us for further information on product characteristics (methods of analysis, etc) and packaging characteristics (description of road tankers, etc).*

## Identification

Sodium hydroxide	NaOH
Molecular weight	40,01
CAS Number	1310-73-2
ID Number (Annex 1)	011-002-00-6
EC Number (EINECS)	215-185-5

# LIQUID CAUSTIC SODA 50%

## Physical and chemical characteristics

Characteristic	Unit	Value
Density (at 20 °C)	kg/dm <sup>3</sup>	1,525
Boiling point (under 101,3 kPa)	°C	142,5
Freezing point (under 101,3 kPa)	°C	12
Viscosity (at 20 °C)	mPa.s	120
Viscosity (at 40 °C)	mPa.s	25,5

## Storage

- Liquid caustic soda must be stored in compliance with relevant laws and regulations. According to climatic conditions and to product concentration, it may be necessary for tanks to be heat insulated and/or equipped with a heating system. Tanks should be banded.
- Liquid caustic soda must be disposed of in compliance with relevant laws and regulations. In case of accidental release, it could be diluted with large quantities of water and then neutralized with an acid.

Please contact us for further information on product handling and storage.

## Safety

- Liquid caustic soda is a **corrosive** product. It rapidly produces burns of the mucous membranes, eyes and skin.
- Liquid caustic soda reacts violently with water and acids with heat release. In contact with some metals, it releases hydrogen.
- Liquid caustic soda should be handled by personnel who have received adequate safety training and have been provided with adequate **individual protective equipments** (gloves, goggles, etc).
- Handling of liquid caustic soda should be accompanied by **collective protective measures** (clearly signalled showers and eye baths in the vicinity).

Please consult our safety data sheet.

## Transport information

UN number	1824
ADR/ADNR/RID/IMDG class	8
Packing group	II
Hazard label	8
Placard	80/1824

To our present knowledge, the information contained herein is accurate as of the date of this document. However, we do not make any warranty, express or implied, or accept any liability in connection with this information or its use. This information is for use by technically skilled persons at their own discretion and risk and does not relate to the use of this product in combination with any other substance or any other process. This is not a license under any patent or other proprietary right. The user alone must finally determine suitability of any information or material for any contemplated use, the manner of use in compliance with relevant legislations and whether any patents are infringed. We reserve our right to make additions, deletions, or modifications to the information at any time without prior notification.