#### **Product Specification Sheet**

## Caustic Soda Lye 50%

**General grade** 

Synonym	Sodium hydroxide solution
Formula	NaOH (aq)
Appearance	Caustic soda lye is a viscous clear, colorless and odorless solution of sodium hydroxide in water

Component		Unit	Limit	Method of analysis
Sodium hydroxide	(NaOH)	% w/w	49.0 - 51.0	SMA 284.01
Sodium carbonate	(Na <sub>2</sub> CO <sub>3</sub> )	% w/w max	× 0.1	SMA 847.04
Sodium chloride	(NaCl)	mg/kg max	۲O (۱۵۵ (۱۵۵ (۱۵۵ (۱۵۵ (۱۵۵ (۱۵۵ (۱۵۵ (۱۵	SMA 269.17
Sodium chlorate	(NaClO <sub>3</sub> )	mg/kg max	× 30	SMA 695.05
Sodium sulfate	(Na <sub>2</sub> SO <sub>4</sub> )	mg/kg max	к 60	SMA 862.05
Aluminum	(AI)	mg/kg max	к 0.5	SMA 862.05
Arsenic	(As)	mg/kg max	× 0.3	SMA 862.05
Calcium	(Ca)	mg/kg max	к 5	SMA 862.05
Cadmium	(Cd)	mg/kg max	к 0.1	SMA 862.05
Chromium	(Cr)	mg/kg max	к 0.5	SMA 862.05
Copper	(Cu)	mg/kg max	к 0.1	SMA 862.05
Iron	(Fe)	mg/kg max	к 5	SMA 862.05
Mercury	(Hg)	mg/kg max	× 0.05	SMA 854.05
Magnesium	(Mg)	mg/kg max	к З	SMA 862.05
Manganese	(Mn)	mg/kg max	× 0.1	SMA 862.05
Nickel	(Ni)	mg/kg max	к 1.0	SMA 862.05
Lead	(Pb)	mg/kg max	٥.25 v	SMA 862.05
Antimony	(Sb)	mg/kg max	к 0.1	SMA 862.05
Selenium	(Se)	mg/kg max	× 0.1	SMA 862.05
Silicon dioxide	(SiO <sub>2</sub> )	mg/kg max	۲O (۱۵	SMA 862.05
Zinc	(Zn)	mg/kg max	× 0.2	SMA 862.05

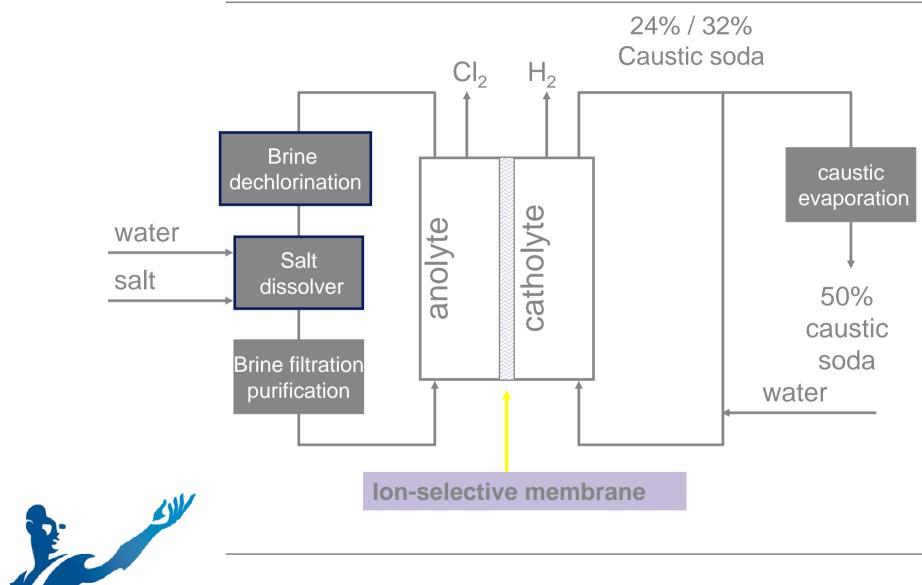
Compliance	<ul> <li>This product complies with the purity requirements of the:</li> <li>European standard for drinking water treatment EN 896:2012, type 1</li> <li>European Pharmacopoeia, latest version</li> <li>Commission Regulation (EU) No 231/2012 on food additives</li> <li>Food Chemicals Codex, latest version</li> </ul>

Remarks

See our Safety Data Sheet for health, safety and physical properties

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# AkzoNobel Production process



# AkzoNobel Production process

Caustic soda is obtained from the electrolysis of salt. A concentrated solution of purified salt (NaCl) in demineralized water (i.e. brine) is decomposed in an electrolytic cell by the passage of an electrical current (DC).

In the electrolytic cell, the sodium chloride solution is decomposed to chlorine at the anode and to a sodium hydroxide solution and hydrogen at the cathode.

#### Membrane electrolysis

In the membrane process the membrane divides the electrolysis cell in the two parts: the anode and cathode compartment.

The anode and the cathode are separated by an ion-exchange membrane. Only sodium ions and a little water pass through the membrane.

The impoverished brine is de-chlorinated and re-saturated with solid salt. After purification the brine is recirculated over the cell.



The caustic soda lye leaves the cell with a 24% concentration, and can be concentrated to 50% in a later stage in the process.



### **Declaration**

### **Genetically Modified Organisms**

Akzo Nobel Industrial Chemicals B.V. declares that to the best of its knowledge it has met all related obligations with respect to following chemical products:

Carbon Tetrachloride Caustic soda lye (all forms) Chloroform Ferric chloride Hydrochloric acid Methyl chloride Methylene chloride Sodium hypochlorite

which we supply to your company <u>do contain neither genetically modified proteins nor genetically</u> <u>modified DNA.</u>

Furthermore Akzo Nobel Industrial Chemicals B.V. declares that raw materials, used for the production of above-mentioned products, are free from animal or genetically modified substances.

Our raw materials, processes and products are controlled within the scope of our ISO 9001-2008 certified quality assurance system.

Akzo Nobel Industrial Chemicals B.V.

S.T. Smit MSc. Technical Service Manager

The above information is provided for our customers only (and we accept no liability to any third parties) and reflects our current knowledge and experience of the product. All products are supplied in accordance with the relevant conditions of sale of the AkzoNobel invoicing company. AkzoNobel can accept no liability for the effects of any chemical combinations or mixtures of the product which are carried out by our customers or third parties. In using the product our customers are reminded to comply with all relevant legal, administrative and regulatory requirements and procedures relating to its use and the protection of the environment.

Updated: 2014-01-22

P.O. Box 247 3800 AE Amersfoort The Netherlands www.akzonobel.com/ic



### **Declaration**

## Melamine

Akzo Nobel Industrial Chemicals B.V. declares that to the best of its knowledge it has met all related obligations with respect to following chemical products:

Calcium chloride Caustic soda lye (all forms) Chloroform Ferric chloride Hydrochloric acid Methyl chloride Methylene chloride Sodium hypochlorite

which we supply to your company are free from Melamine.

Our raw materials, processes and products are strictly controlled within the scope of our ISO 9001-2008 certified quality assurance system.

Akzo Nobel Industrial Chemicals B.V.

S.T. Smit MSc. Technical Service Manager

The above information is provided for our customers only (and we accept no liability to any third parties) and reflects our current knowledge and experience of the product. All products are supplied in accordance with the relevant conditions of sale of the AkzoNobel invoicing company. AkzoNobel can accept no liability for the effects of any chemical combinations or mixtures of the product which are carried out by our customers or third parties. In using the product our customers are reminded to comply with all relevant legal, administrative and regulatory requirements and procedures relating to its use and the protection of the environment.

Updated: 2014-01-22

P.O. Box 247 3800 AE Amersfoort The Netherlands www.akzonobel.com/ic



#### Halal

Product	Caustic Soda Lye
Valid until	31.12.2022

Nobian Caustic Soda Lye is free of alcohol and animal-derived components or products. Alcohol and animal-derived components or products are neither used as raw material nor added intentionally during the whole manufacturing process of Nobian Caustic Soda Lye. The product is produced and handled on dedicated production lines, hence cross-contamination with alcohol and animal-derived components or products is ruled out.

Nobian has contracted all transport of the product and agrees on pre-cargo with the transport companies. Nobian prohibits the following materials as pre-cargo/pre-load.

- Tallow, lards and grease,
- Non-vegetable glycerine/glycerol,
- Animal derived stearic, palmitic and oleic acid of salts thereof,
- Gelatine,
- Any other material derived from pork,

Note

To the best of its knowledge, Nobian declares this declaration to accurately describe the product's physical, chemical and/or manufacturing process attributes. Nobian does not make any warranty as to the suitability of its products for any application. The manufacture of this product (incl raw materials, production process and final product) and sales are controlled under the certified Nobian ISO 9001 quality system.

#### הרבנות הראשית לנעדרלאנד

#### CHIEF RABBINATE OF HOLLAND

Van der Boechorststraat 26 POB 7967 1008 AD AMSTERDAM 2018 + 31 - 20 301 8490 kosher@nik.nl www.kosherholland.nl

YL 210183

Amsterdam, 23 ELLUL 5781 31.08.2021

#### TO WHOM IT MAY CONCERN

This is to certify that we checked the following products by:

NOBIAN INDUSTRIAL CHEMICALS - AMERSFOORT - HOLLAND

and produced by:

NOBIAN BITTERFELD NOBIAN DELFZIJL NOBIAN FRANKFURT NOBIAN IBBENBUREN NOBIAN ROTTERDAM NOURYON DELFZIJL CHEMOURS DORDRECHT SABIC BERGEN OP ZOOM ITALMATCH FRANKFURT

CAUSTIC SODA (SOLUTION AND PRILLS) CHLORINE HYDROCHLORIC ACID HYDROGEN CHLORIDE HYDROGEN SODIUM HYPOCHLORITE SODIUM SULPHATE CALCIUM CHLORIDE SOLUTION FERRIC CHLORIDE METHYL CHLORIDE, METHYLENE CHLORIDE CHLOROFORM

These products are PARVE and KOSHER included KOSHER FOR PASSOVER.

This certification is effective till 31.08.2022 and is subject to renewal at that time

Chief Rabbinate of Holland

NORE NAK NAK

Rabbi E.M. Maarsen



Akzo Nobel Industrial Chemicals B.V. Chlor Alkali P.O. Box 247 3800 AE Amersfoort The Netherlands T +31 33 467 6923 F +31 33 467 6157 www.akzonobel.com/ic



**Declaration** 

#### **BSE/TSE Declaration**

Akzo Nobel Industrial Chemicals B.V. declares that to the best of its knowledge it has met all related obligations with respect to following chemical products:

Caustic Soda Lye Caustic soda prills Hydrochloric acid Sodium hypochlorite Ferric chloride Methyl Chloride Methylene Chloride Chloroform Carbon Tetrachloride

The above mentioned products are free from any animal products, even in minute traces.

Furthermore Akzo Nobel Industrial Chemicals B.V. declares that raw materials, used for the production of above-mentioned products, are completely free from genetically modified substances.

Our raw materials, processes and products are strictly controlled within the scope of our ISO 9001-2008 certified quality assurance system.

Akzo Nobel Industrial Chemicals B.V.

S.T. Smit MSc. Technical Service Manager

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