



TECHNICAL DATA SHEET

MVC-TDS-02B
Issue Date : 1/18/23
Rev. Code : 02
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Product Name
Liquid Caustic Soda (50% w/w)

Product Description

Sodium hydroxide, also known as lye and caustic soda, is an inorganic compound with the formula NaOH. It is a widely used chemical produced by the electrolysis of an aqueous NaCl salt solution (brine).

Typical Applications

- Pulp and paper manufacturing
- Partial water softening
- Cooking oils and fats refining and purification
- Steel production
- Starch and derivatives production
- Alkali metal cleaners
- Soaps and detergents processing

Product Characteristics

- Derivatizing reagent
- Digesting agent
- Strong base
- Neutralizing agent
- Corrosive

Product Registration

- Liquid Caustic Soda
Category Code: A1, G1, 3DX
NSF Registration No. 151722

Product Packaging

- Tanker
- Lorry
- HDPE Drum
- Carboy

General Properties

Appearance	Clear viscous liquid	Vapor Density	No data available
Odor	Odorless	Specific Gravity, min.	1.504 at 30°C
Flash Point	Not applicable	Solubility	Completely soluble
pH	>14 at 100g/l at 20°C	Evaporation rate	Not available
Freezing Point/Range	-12°C	Viscosity	78 mPa-s at 20°C
Boiling Point /Range	142°C – 144°C	Concentration	48.00% min.
Vapor Pressure	2.0 hPa (18 mmHg) at 20°C		

Product Technical Assistance

For technical assistance or further information on this product or any other MVC products, contact your MVC technical service representative at the address or telephone number given below.

Process Flow



The salt is dissolved with water to produce brine solution. Brine is then added with chemicals to precipitate and remove the impurities that can cause membrane performance inefficiency. The brine solution undergoes a series of filtration process steps to remove further any contaminants and impurities present in the solution. Then, the brine solution undergoes electrolysis to produce liquid caustic soda with 32% w/w, along with H₂ gas and Cl₂ gas. Lastly, the NaOH produced undergoes evaporation to increase the concentration up to 50% w/w.



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Storage

- Store in corrosive resistant container.
- Close the lid or cover of the container so that it is airtight in order to avoid moisture absorption.
- Caustic soda must be stored separate from other chemicals. Keep acids away from caustic soda, and do not place the containers of caustic soda on top of other containers containing organic chemicals.
- Do not expose it to low temperatures for a long period of time.

Safety Precautions

- Since caustic soda generates heat when it is diluted by water or neutralized by an acid, and may form a mist, make sure the eyes or skin are not exposed to the mist.
- Keep container closed when not in use.
- Emergency shower and eyewash facility should be in close proximity to where caustic soda is handled.
- Avoid contact with eyes, skin and clothing.
- Wash hands thoroughly after handling.
- Wear protective goggles and rubber gloves, and wear rubber boots or protective clothing as required.

Related Documents

- The latest version of this document will be available at our website, or can be obtained from the MVC technical service representative.
- The following related documents are available on request, and represent various aspects on the usability, safety, recovery and disposal of the product.
 - Safety Data Sheet

Disclaimer

- The product can be used only for the application as specified hereabove.
- To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication, however we do not assume any liability whatsoever for the accuracy and completeness of such information.
- We make no warranties which extend beyond the description contained herein. Nothing herein shall constitute any implied warranty of merchantability or fitness for a particular purpose.
- It is the customer's responsibility to inspect and test our products in order to satisfy itself as to the suitability of the products for the customer's particular purpose. The customer is responsible for the appropriate, safe and legal use, processing and handling of our products.
- No liability can be accepted in respect of the use of our products in conjunction with other materials. The information contained herein relates exclusively to our products when not used in conjunction with any third party materials.