

# SAFETY DATA SHEET

## CAUSTIC SODA LIQUOR, 5% - 50% (11-106 TW)

**mc550**

### 1. Identification of the substance/preparation and of the company/undertaking

**Product name** : CAUSTIC SODA LIQUOR, 5% - 50% (11-106 TW)      **Supplier** : Brenntag UK and Ireland  
 Albion House  
 Rawdon Park  
 Green Lane  
 Yeadon  
 Leeds  
 LS19 7XX

**Chemical product name** : SODIUM HYDROXIDE SOLUTION 5-50%

**Synonyms** : CAUSTIC SODA LIQUOR, 5% - 50% (11-106 TW)

**EMERGENCY ONLY TELEPHONE NUMBER** : (N.C.E.C. CULHAM) 01865 407333      **Telephone No.** : (0113) 3879200

**Formula** : NaOH      **Fax No.** : (0113) 3879280

**Molecular Mass** : 40.01

### 2. Composition/information on ingredients

**Substance/Preparation** : Substance

Chemical name*	CAS No.	%	EC Number	Symbol	R-Phrases
1) SODIUM HYDROXIDE SOLUTION 5-50%	1310-73-2	5-50	215-185-5	C	R35

\* Occupational Exposure Limit(s), if available, are listed in Section 8

**CAS No.** 1310-73-2  
**EINECS Number** 215-185-5

### 3. Hazards identification

**Human health hazards** : Causes severe burns.

### 4. First-aid measures

#### First-Aid measures

- Inhalation** : Remove from exposure. Keep warm and at rest. If there is difficulty in breathing, give oxygen. If breathing stops or shows signs of failing, give artificial respiration. Do not use mouth to mouth ventilation. Obtain medical attention urgently.
- Ingestion** : Wash out mouth with water. Have victim drink 240-300ml of water to dilute stomach contents. Obtain medical attention. Do not induce vomiting.
- Skin contact** : Immediately flood the skin with large quantities of water, preferably under a shower. Remove contaminated clothing as washing proceeds. Obtain medical attention if blistering occurs or redness persists.
- Eye Contact** : Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention urgently.

#### Effects and symptoms

- Inhalation** : Exposure to mist may have the following effects:- severe irritation of nose, throat and respiratory tract. pulmonary oedema. bronchitis.
- Ingestion** : Swallowing may have the following effects:- corrosion of mouth, throat and digestive tract. nausea. haematemesis. perforation of the oesophagus. gastric perforation.
- Skin contact** : Product will cause severe chemical burns. Repeated and/or prolonged contact may lead to dermatitis.
- Eye Contact** : Liquid or mist will cause conjunctival irritation and possibly corneal damage.
- Aggravating conditions** : Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract irritation, leading to frequent attacks of bronchial infection.

**Notes to physician** : In the case where material has entered the eyes, a sterile pad and bandage should be applied.

## 5. Fire-fighting measures

### Extinguishing Media

- Suitable** : Not combustible. Select extinguishing agent appropriate to other materials involved. Keep containers and surroundings cool with water spray.
- Unusual fire/explosion Hazards** : This product may give rise to hazardous fumes in a fire. Attacks most metals, liberating flammable hydrogen gas which may form an explosive mixture with air.
- Hazardous thermal (de)composition products** : Attacks many metals liberating hydrogen gas.
- Special fire-fighting procedures** : Fire fighters should wear self-contained positive pressure breathing apparatus (SCBA) and full turnout gear.
- Protection of fire-fighters** : Wear full protective clothing and self-contained breathing apparatus.

## 6. Accidental release measures

- Personal Precautions** : Wear appropriate protective clothing. Wear respiratory protection.
- Environmental precautions and cleanup methods** : Contain and absorb using earth, sand or other inert material. Transfer into suitable containers for recovery or disposal. Finally flush area with plenty of water.  
: Advise Authorities if spillage has entered water course or sewer or has contaminated soil or vegetation.

## 7. Handling and storage

- Handling** : Use in well ventilated area. Avoid inhaling mist. Avoid contact with eyes, skin and clothing. Emergency shower and eye wash facilities should be readily available.
- Storage** : Storage area should be: well ventilated. away from incompatible materials.  
Storage tanks should be completely enclosed apart from vent and overflow connections.  
Storage temperature should be kept below 50 °C. Recommended minimum storage temperature varies with concentration due to different freezing points.  
Suitable storage materials are:- stainless steel. mild steel. nickel. polypropylene.  
Do not store in:- aluminium and its alloys. brass. lead. copper and its alloys. zinc. tin.
- Packaging materials**
- Recommended use** : Use original container.

## 8. Exposure controls/personal protection

- Engineering measures** : Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of mist below their respective threshold limit value. Ensure that eyewash stations and safety showers are close to the workstation location.
- Hygiene measures** : Wash hands after handling compounds and before eating, smoking, using lavatory, and at the end of day.

<u>Ingredient Name</u>	<u>Workplace Exposure Limits</u>
1) SODIUM HYDROXIDE ...%	<b>EH40 (United Kingdom (UK), 2005).</b> STEL: 2 mg/m <sup>3</sup>

### Personal protective equipment

- Respiratory system** : Respiratory protection if there is a risk of uncontrolled exposure to mist.
- Skin and body** : Wear: overall or apron. rubber boots. If there is danger of splashing, wear: PVC or other impermeable suit. rubber apron.
- Hands** : PVC or rubber gloves.
- Eyes** : Chemical goggles.

## 9. Physical and chemical properties

- Physical state** : Liquid.
- Colour** : Colourless. to Grey.
- Odour** : Odourless.
- Boiling point** : 105 to 145.
- Melting point** : Melts between -28 and 15. (depending on concentration)  
Variation of melting point is not proportional to concentration.
- Density** : 1.1 to 1.4 g/cm<sup>3</sup>
- Solubility** : Completely soluble.
- pH** : 14 [Basic.]
- Flash point** : Not available.
- Viscosity** : 2-78 cP at 20 C.

## 10. Stability and reactivity

- Stability** : The product is stable.
- Conditions to Avoid** : Keep away from moisture.
- Materials to avoid** : Acids. Ammonia. Ammonium salts. Alcohols. Peroxides. Halogenated solvents. Nitroalkanes. Acid anhydrides. Aluminium. Zinc. Tin. Magnesium. Aldehydes. Ketones. Unsaturated oils. Sugars. Phosphorous.
- Hazardous decomposition products** : Attacks many metals liberating hydrogen gas.

## 11. Toxicological information

### Local effects

- Skin irritation** : Extremely hazardous in case of skin contact (corrosive).
- Eye irritation** : Extremely hazardous in case of eye contact (corrosive).
- Acute toxicity** : Oral LD50 (rabbit) 500mg/kg. (10% solution)
- Inhalation: Burns mucous membranes.  
Ingestion: Risk of perforation in the oesophagus and stomach.
- Chronic toxicity** : Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract irritation, leading to frequent attacks of bronchial infection.

## 12. Ecological information

- Ecotoxicity** : The product is rated as slightly toxic to aquatic species. High concentrations injure aquatic life by effect on pH. Do not allow to enter drains or watercourses.

## 13. Disposal considerations

- Methods of disposal ; Waste of residues ; Contaminated packaging** : Dispose of in accordance with all applicable local and national regulations.

- Waste Classification** : Not applicable.

## 14. Transport information

### International transport regulations

- UN : UN number** 1824
- UN : Proper shipping name** SODIUM HYDROXIDE SOLUTION (SODIUM HYDROXIDE SOLUTION 5-50%)
- UN : Class** 8
- UN : Packing group** II
- UN : Label**



- ADR/RID : Class** 8
- ADR/RID : Hazard identification number** 80
- IMDG : Proper shipping name** SODIUM HYDROXIDE SOLUTION (SODIUM HYDROXIDE SOLUTION 5-50%)
- IMDG : Packing group** II
- IMDG : Class** 8
- IATA : Proper shipping name** SODIUM HYDROXIDE SOLUTION (SODIUM HYDROXIDE SOLUTION 5-50%)
- IATA : Packing group** II
- IATA : Class** 8

## 15. Regulatory information

### EU Regulations

- Hazard symbol(s)** : 
- Classification** : Corrosive
- Risk Phrases** : R35 Causes severe burns.

## CAUSTIC SODA LIQUOR, 5% - 50% (11-106 TW)

<b>Safety Phrases</b>	: S1/2 Keep locked up and out of reach of children. S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36/37/39- Wear suitable protective clothing, gloves and eye/face protection. S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
<b>Contains</b>	: - SODIUM HYDROXIDE SOLUTION 5-50%
<b>Product Use</b>	: Classification and labelling have been performed according to EU directives 67/548/EEC, 88/379/EEC, including amendments and the intended use. - Consumer applications.

## 16. Other information

### HISTORY

<b>Date of printing</b>	: 21/08/2009.
<b>Date of issue</b>	: 21/08/2009.
<b>Date of previous issue</b>	: 12/01/2009.
<b>Version</b>	: 3.04
<b>Prepared by</b>	: Michael Hale / Alistair Hunter

### Notice to Reader

*To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.  
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.*

### **CHANGES SINCE PREVIOUS VERSIONS:**

Vapour replaced by mist

Version 3.04

Page: 4/4