Bloomchemag Pvt Ltd	**MATERIAL SAFETY DATASHEET**	**MSDS No.**	**02**
	Caustic Soda (Liquid)	**Effective From**	**30/09/2022**

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Substance name:	Caustic Soda Liquid
REACH Reg. No.:	01-2119457892-27-XXXX
CAS No.:	1310-73-2
EC No.:	215-185-5

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses:	Used as a raw material in the manufacture of soaps, detergents, textiles and paper. Also, inwater softening and treatment, drilling mud in oil field, refining petroleum products, in sanitation,hygiene and production chemicals.
Uses advised against:	Not available.

1.3 Details of the supplier of the SDS

Company name Supplier	: BloomchemAG BV
Address	: Sint-Antoniusstraat 16 b1 B-2400, Mol, Belgium BTW BE 0544.589.474
E-mail:	Corporate@bloomcheag.com

Section 2: Composition/information on ingredients

2.1 Substance information

Substance name	Synonym	CAS No.	EC No.	Molecular formula	Concentration
Sodium Hydroxide	Caustic Soda	1310-73-2	215-185-5	NaOH	50%

Remark: The rest unspecified ingredients are impurities, and they are not hazard.

Section 3: Hazards identification

3.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008[CLP]

Classification	Classification procedure
Skin irritation 2	H315
Eye Irritation 2	H319

Classification according to EU Directive 67/548/EEC or 1999/45/ECAdditional information

Full text of R-phrase(s) and H-statement(s): see section 16.

3.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP]

Product identifier: Acrylonitrile

Hazard pictogram(s):

GHS05

Signal word: Danger.

Hazard statements: H314 Causes severe skin burns and eye damage.

Precautionary statements:

Prevention: P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P264 Wash thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response: P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinseskin with water/shower.
P363 Wash contaminated clothing before reuse.
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable forbreathing.
P310 Immediately call a POISON CENTER or doctor/physician.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage: P405 Store locked up.

Disposal: P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Supplemental Hazard information (EUH):

No information available.

3.3 Other hazards

No information available.

Section 4: First aid measures

4.1 Description of first aid measures

General notes: In all cases of doubt, or when symptoms persist, seek medical attention.
Following inhalation:
Fresh air, rest. Half-upright position. Artificial respiration may be needed. Refer for medical attention.Following skin contact:
Remove contaminated clothes. Rinse skin with plenty of water or shower. Refer for medical attention.Following eye contact:
First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor. Following ingestion:
Rinse mouth. Do NOT induce vomiting. Give plenty of water to drink. Refer for medical attention.Notes for the doctor:
Treat symptomatically and supportively.
Treatment may vary with condition of victim and specifics of incident.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation: Corrosive. Burning sensation. Sore throat. Cough. Laboured breathing. Shortness of breath. Symptoms may be delayed
Skin contact: Corrosive. Redness. Pain. Serious skin burns. Blisters.
Eyes contact: Corrosive. Redness. Pain. Blurred vision. Severe deep burns.
Ingestion: Corrosive. Burning sensation. Abdominal pain. Shock or collapse.

4.3 Indication of the immediate medical attention and special treatment needed

Persons with pre-existing skin, eye, or respiratory disease may be at increased risk from the irritant or allergic properties of this material.
Attending physician should treat exposed patients symptomatically.

Section 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media:	Powder, alcohol-resistant foam, water spray, carbon dioxide.

Unsuitable extinguishing media: Not available.

5.2 Special hazards arising from the substance or mixture

Not combustible

5.3 Advice for fire-fighters

Do not stay in dangerous zone without self-contained breathing apparatus.
In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.Ensure
adequate ventilation
Avoid generation of dusts; do not inhale dusts. Avoid substance contact

6.2 Environmental precautions

Do not empty into drains.
Do not allow material to be released to the environment without proper governmental permits.

6.3 Methods and material for containment and cleaning up

Use neutralizing agent.
Dispose of contaminated material as waste according to section 13.Ensure
adequate ventilation.

6.4 Reference to other sections

See Section 7 for information on safe handling.
See section 8 for information on personal protection equipment.See
Section 13 for information on disposal.

Section 7: Handling and storage

7.1 Precautions for safe handling

Keep containers tightly sealed.
Store in cool, dry place in tightly closed containers. Ensure
good ventilation/exhaustion at the workplace.

7.2 Conditions for safe storage, including any incompatibilities

Separated from strong acids, metals, food and feedstuffs. Dry. Well closed. Store in an area having corrosion resistantconcrete floor. No aluminium, tin, or zinc containers.Do
not store above23°C (73.4°F).

7.3 Specific end use(s)

Not available.

Section 8 : Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values:

CAS # 1310-73-2 Country of origin	Occupational exposure limit values			
	Long term/ Eight hours		Short term	
Austria	-	2 mg/m^3 inhalable aerosol	-	4 mg/m^3 inhalable aerosol
Belgium	-	2 mg/m^3	-	-
Canada	-	-	-	2 mg/m^3
Denmark	-	2 mg/m^3	-	-
European Union	-	-	-	-
France	-	2 mg/m^3	-	-
Germany (AGS)	-	-	-	-
Germany (DFG)	-	-	-	-
Hungary	-	2 mg/m^3	-	2 mg/m^3
Italy	-	-	-	-
Japan	-	-	-	-
Poland	-	0.5 mg/m^3	-	1 mg/m^3
Spain	-	2 mg/m^3	-	-
Sweden	-	1 mg/m^3	-	-
Switzerland	-	2 mg/m^3 inhalable aerosol	-	2 mg/m^3 inhalable aerosol
The Netherlands	-	-	-	-
USA – NIOSH	-	-	-	2 mg/m^3
USA – OSHA	-	2 mg/m^3	-	-

United Kingdom	-	-	-	2 mg/m^3-

8.2 Exposure controls

Appropriate engineering controls:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.Personal protective equipment:

Eye and face protection: Safety goggles or eye protection in combination with breathing protection.Skin protection:

full contact:

Glove material: Nitrile rubber

Glove thickness: 0,11 mm Break through time: > 480 min

splash contact:

Glove material: Nitrile rubber

Glove thickness: 0,11 mm Break through time: > 480 min

Respiratory protection: Use Ventilation, local exhaust, or breathing protection.

Thermal hazards: Not available.

Environmental exposure controls:

Do not allow material to be released to the environment without the proper governmental permits.Industrial hygiene:

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:	Liquid
Colour:	Clear, colorless
Odour:	Odourless
pH:	13.5 [Basic.]
Melting point:	12°C (53.6°F)
Boiling point:	140°C (284°F)
Heat Capacity:	Not available.
Heat of Fusion:	Not available.
Standard Heat of Formation:	Not available.
Critical Temperature:	Not available.
Specific Gravity:	1.53 (Water = 1)
Vapor Pressure:	The highest known value is 2.3 kPa (@ 20°C) (Water).
Vapor Density:	Not applicable.

Volatility:	Not applicable.
Odor Threshold:	Not applicable.
Water/Oil Dist. Coeff.:	Not applicable.
Ionicity (in Water):	Not applicable.
Dispersion Properties:	See solubility in water.
Solubility:	Easily soluble in cold water

9.2 Other information

No data available.

Section 10: Stability and reactivity

10.1 Reactivity

Hygroscopic. Much heat is evolved when solid material is dissolved in water. Therefore cold water and caution must be used for this process. Sodium hydroxide solution and octanol + diborane during a work-up of a reaction mixture of oxime and diborane in tetrahyrofuran is very exothermic, a mild explosion being noted on one occassion.
Reactive with water, acids (mineral, non-oxidizing, e.g. hydrochloric, hydrofluoric acid, muriatic acid, phosphoric),acids (mineral, oxidizing e.g. chromic acid, hypochlorous acid, nitric acid, sulfuric acid), acids (organic e.g. acetic acid, benzoic acid, formic acid, methanoic acid, oxalic acid), aldehydes (e.g. acetaldehyde, acrolein, chloralhydrate, foraldehyde), carbamates (e.g. carbanolate, carbofuran), esters (e.g. butyl acetate, ethyl acetate, propylformate), halogenated organics (dibromoethane, hexachlorobenzene, methyl chloride, trichloroethylene),isocyanates (e.g. methyl isocyanate), ketones (acetone, acetophenone, MEK, MIBK), acid chlorides, strongbases, strong oxidizing agents, strong reducing agents, flammable liquids,powdered metals and metals (i.ealuminum, tin, zinc, hafnium, raney nickel), metals (alkali and alkaline e.g. cesium, potassium, sodium), metal compounds (toxic e.g. berylium, lead acetate, nickel carbonyl, tetraethyl lead), mitrides (e.g. potassium nitride,sodium nitride), nitriles (e.g. acetonitrile, methyl cyanide), nitro compounds (organic e.g. nitrobenzene, nitromethane), acetic anhydride, chlorohydrin, chlorosulfonic acid, ethylene cyanohydrin, glyoxal, hydrosulfuricacid, oleum, propiolactone, acylonitrile, phorosous pentoxide, chloroethanol, chloroform-methanol,tetrahydroborate, cyanogen azide, 1,2,4,5 tetrachlorobenzene, cinnamaldehyde. Reacts with formaldehyde hydroxide to yield formic acid, and hydrogen.

10.2 Chemical stability

The product is stable.

10.3 Possibility of hazardous reactions

The substance is a strong base; it reacts violently with acid and is corrosive in moist air to metals like zinc, aluminium, tin andlead forming a combustible/explosive gas.
Reacts with ammonium salts to produce ammonia, causing fire hazard. Attacks some forms of plastics, rubber or coatings.

10.4 Conditions to avoid

Moisture.

10.5 Incompatible materials

Highly reactive with metals. Reactive with oxidizing agents, reducing agents, acids, alkalis, moisture.

10.6 Hazardous decomposition products

Sodium oxide.

Section 11: Toxicological information

11.1 Toxicokinetics, metabolism and distribution

Not available.

11.2 Information on toxicological effects

Routes of Entry:	Absorbed through skin. Dermal contact. Eye contact. Inhalation. Ingestion.Toxicity to
Animals:	LD50: Not available. LC50: Not available.
Chronic Effects on Humans:	MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells.
Other Toxic Effects on Humans:	Extremely hazardous in case of inhalation (lung corrosive).Very hazardous in case of skin contact (corrosive, irritant, permeater), of eye contact (corrosive), of ingestion,
Special Remarks on Toxicity to Animals:	Not available.
Special Remarks on Chronic Effectson Humans:	May affect genetic material. Investigation as a mutagen (cytogenetic analysis)
Special Remarks on other ToxicEffects on Humans:	Acute Potential Health Effects: Skin: May be harmful if absorbed through skin. Causes severe skin irritation and burns. May cause deep enterating ulcers of the skin. Eyes: Causes severe eye irritation and burns. May cause chemical conjunctivitis and corneal damage. Inhalation: Harmful if inhaled. Causes severe irritation of the respiratory tract and mucous membranes with coughing, burns, breathing difficulty, and possible coma. Irritation may lead the chemical pneumonitis and pulmonary edema. Causes chemical burns to the respiratory tract and mucous membranes. Ingestion: May be fatal if swallowed. May cause severe and permanent damage to the digestive tract. Causes severe gastrointestinal tract irritation and burns. May cause perforation of the digestive tract. Causes severe pain, nausea, vomiting, diarrhea, and shock. May cause corrosion and permanent destruction of the esophagus and digestive tract.

Section 12: Ecological information

12.1 Toxicity

No data available.

12.2 Persistence and degradability

The methods for determining biodegradability are not applicable to inorganic substances.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Other adverse effects

Harmful effect due to pH shift.
Neutralization possible in waste water treatment plants.

Section 13: Disposal considerations

13.1 Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport information

14.1 Transport information

DOT Classification:	Waste must be disposed of in accordance with federal, state and local environmental control regulations.
Identification	Sodium hydroxide, lqiud UN NO: 1824 PG: II Special
Provisions for Transport	Air transport: IATA/ICAO- Class 8, UN 1824, PG II.

DOT (Pictograms)

Section 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulation:	
Authorisations:	No information available.
Restrictions on use:	No information available.
EINECS:	This substance is listed in the inventory.
DSD (67/548/EEC):	This substance is listed in the Annex I.
Other chemical regulation:	
USA - TSCA:	This substance is listed in the inventory.
Canada - DSL:	This substance is listed in the inventory.
Australia - AICS:	This substance is listed in the inventory.
Korea - ECL:	This substance is listed in the inventory.
Japan - ENCS:	This substance is listed in the inventory.
Philippiens-PICCS	This substance is listed in the inventory.
New Zealand:	This substance is listed in the inventory.
Israel	This substance is listed in the inventory.

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance.

Section 16: Other information

16.1 Revision Information:

Date of the previous revision: Not applicable.

Date of this revision: 1/1/2022

Revision summary: The first new SDS

16.2 Abbreviations and acronyms

CLP: EU regulation (EC) No 1272/2008 on classification, labelling and packaging of chemical substances andmixtures.

CAS:	Chemical Abstracts Service (division of the American Chemical Society).
EINECS:	European Inventory of Existing Commercial Chemical Substances.
RID:	European Rail Transport.
IMDG:	International Maritime Code for Dangerous Goods.
IATA:	International Air Transport Association.
OSHA:	The United States Occupational Safety and Health Administration.
TSCA:	Toxic Substances Control Act, The American chemical inventory. DSD:
	Dangerous Substance Directive (67/548/EEC).
DSL:	Domestic Substances List, The Canadian chemical inventory.AICS:
	The Australian Inventory of Chemical Substances.
ECL:	Existing Chemicals List, the Korean chemical inventory.
ENCS:	Japanese Existing and New Chemical Substances.
PICCS	Philippine Inventory of Chemicals and Chemical Substances

16.3 Key literature references and sources for data

ESIS IUCLID Dataset: European chemical Substances Information System.HSDB:
Hazardous Substances Data Bank.
ICSC: International Chemical Safety Cards.

16.4 Relevant R-phrases and H-statements

R-phrases (code and full text):
R35 Causes severe burns.
H-statements (code and full text):
H314 Causes severe skin burns and eye damage.

16.5 Training advice

No data available.

16.6 Declare to reader

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Bloomchemag, assumes no responsibility for the completeness or accuracy of the information contained herein.