# **SAFETY DATA SHEET**

# **CAUSTIC SODA**

Infosafe No.: LQ83U ISSUED Date : 15/07/2017 ISSUED by: BONDALL PTY LTD

## 1. IDENTIFICATION

## **GHS Product Identifier**

**CAUSTIC SODA** 

#### **Product Code**

2kg - 90102, 500g - 90100

## **Company Name**

BONDALL PTY LTD (ABN 27 008 734 996)

#### **Address**

Australia: 113 Belmont Avenue Belmont, WA 6104 Australia

New Zealand: Owens Logistics,

3-5 Kahu Street,

Otahuhu, Auckland 2024

# Telephone/Fax Number

Tel: Australia: +61 (8)6272 3800 / New Zealand: 0800 474 7738

Fax: +61 (8)9277 4068

## **Emergency phone number**

AU: 1800 638 556, NZ: 0800 154 666

## Recommended use of the chemical and restrictions on use

Chemical manufacture; acid neutralisation; pulp and paper, aluminium, detergent, and textile processing; vegetable oil refining; reclaiming rubber; etching and electroplating; food additive.

# 2. HAZARD IDENTIFICATION

# GHS classification of the substance/mixture

Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Corrosive to Metals: Category 1
Eye Damage/Irritation: Category 1
Skin Corrosion/Irritation: Category 1A

Hazardous to the Aquatic Environment - Acute Hazard: Category 3

# Signal Word (s)

**DANGER** 

# Hazard Statement (s)

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H402 Harmful to aquatic life.

# Pictogram (s)

Corrosion



#### Precautionary statement - Prevention

P234 Keep only in original container.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash contaminated skin thoroughly after handling

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

#### Precautionary statement - 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. Rinse skin with water/shower.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

P363 Wash contaminated clothing before reuse.

P390 Absorb spillage to prevent material damage.

#### Precautionary statement - Storage

P405 Store locked up.

P406 Store in corrosive resistant/ container with a resistant inner liner.

## Precautionary statement - Disposal

P501 Dispose of contents/container to an approved waste disposal plant.

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

## Ingredients

Name	CAS	Proportion
Sodium hydroxide	1310-73-2	<=100 %

## 4. FIRST-AID MEASURES

## Inhalation

If inhaled, remove affected person from contaminated area. Apply artificial respiration if not breathing. Seek medical attention.

## Ingestion

Do not induce vomiting. Wash out mouth thoroughly with water. Seek immediate medical attention.

#### Skin

Remove all contaminated clothing immediately. Wash gently and thoroughly with water and non-abrasive soap for 15 minutes. Ensure contaminated clothing is washed before re-use or discard. Seek immediate medical attention.

## Eye contact

If in eyes, hold eyelids apart and flush the eyes continuously with running water. Remove contact lenses. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Seek immediate medical attention.

## **First Aid Facilities**

Eyewash, safety shower and normal washroom facilities.

#### **Advice to Doctor**

Treat symptomatically.

# **Other Information**

For advice in an emergency, contact a Poisons Information Centre (Phone Australia 131 126) or a doctor at once.

## 5. FIRE-FIGHTING MEASURES

#### **Suitable Extinguishing Media**

Carbon dioxide, dry chemical, foam, water fog or water mist.

#### **Unsuitable Extinguishing Media**

Do not use water jet.

#### **Hazards from Combustion Products**

Under fire conditions this product may emit toxic and/or irritating fumes and gases including oxides of sodium.

## **Specific Hazards Arising From The Chemical**

This product is non combustible.

#### **Hazchem Code**

2W

## **Decomposition Temperature**

Not available

## Precautions in connection with Fire

Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. Fight fire from safe location.

# **6. ACCIDENTAL RELEASE MEASURES**

## **Emergency Procedures**

Evacuate all unprotected personnel. Do not allow contact with skin and eyes. Do not breathe dust. It is essential to wear self-contained breathing apparatus (S.C.B.A) and full personal protective equipment and clothing to prevent exposure. Avoid exposure to spillage by sweeping up material avoiding dust generation or dampen spilled material with water to avoid airborne dust, then transfer material to suitable containers. Use absorbent paper dampened with water to pick up remaining material. Wash surfaces well with soap and water. Seal all wastes in labelled containers for subsequent recycling or disposal. Dispose of waste according to applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

# 7. HANDLING AND STORAGE

#### **Precautions for Safe Handling**

Corrosive solid. Attacks skin and eyes. Causes burns. Avoid breathing in dust. Wear suitable protective clothing, gloves and eye/face protection when mixing and using. Use in designated areas with adequate ventilation. Keep containers tightly closed. Ensure a high level of personal hygiene is maintained when using this product, that is, always wash hands after handling, and before eating, drinking, smoking or using the toilet facilities.

## Conditions for safe storage, including any incompatibilities

Corrosive. Store in a cool dry well-ventilated area. Store away from oxidising agents and acids. Keep containers closed when not in use, securely sealed and protected against physical damage. Hygroscopic. Protect from exposure to moisture. Inspect regularly for deficiencies such as damage or leaks. Store in original packages as approved by manufacturer. Ensure that storage conditions comply with applicable local and national regulations.

For information on the design of the storeroom, reference should be made to Australian Standard AS 3780 The storage and handling of corrosive substances.

## Corrosiveness

May be corrosive to metals.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

# **Occupational exposure limit values**

Sodium hydroxide

Peak limitation: 2mg/m³

Peak Limitation: A ceiling concentration which should not be exceeded over a measurement period which should be as short as possible but not exceeding 15 minutes.

## **Biological Limit Values**

No biological limits allocated.

#### **Appropriate Engineering Controls**

This substance is hazardous and should be used with a local exhaust ventilation system, drawing solid/dust away from workers' breathing zone. If the engineering controls are not sufficient to maintain concentrations of particulates below the exposure standards, suitable respiratory protection must be worn.

## **Respiratory Protection**

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable dust/particulate filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements.

Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

## **Eye Protection**

Safety glasses with full face shield should be used. Eye protection devices should conform to relevant regulations. Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.

#### Hand Protection

Wear gloves of impervious material such as rubber. Final choice of appropriate gloves will vary according to individual circumstances. i.e. methods of handling or according to risk assessments undertaken. Occupational protective gloves should conform to relevant regulations.

Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.

#### **Body Protection**

Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

#### **Form**

Solid

#### **Appearance**

Solid, pearl

## Colour

White

#### Odour

**Odourless** 

## **Decomposition Temperature**

Not available

#### **Melting Point**

318 °C

## **Boiling Point**

1390 °C

## Solubility in Water

1.260 g/L (20 °C) (approximately)

#### рΗ

14 (5% solution)

# **Vapour Pressure**

Not available

#### Vapour Density (Air=1)

Not available

# **Evaporation Rate**

Not available

# **Odour Threshold**

Not available

## Viscosity

Not available

#### **Volatile Component**

50%

#### Partition Coefficient: n-octanol/water

Not available

## Density

2.13 g/cm<sup>3</sup>

#### Flash Point

Not available

#### **Flammability**

Non-flammable

## **Auto-Ignition Temperature**

Not available

#### **Explosion Limit - Upper**

Not available

#### **Explosion Limit - Lower**

Not available

#### 10. STABILITY AND REACTIVITY

## **Chemical Stability**

Stable under normal conditions of storage and handling. Hygroscopic . Slowly absorbs moisture from air.

## **Reactivity and Stability**

Reacts with incompatible materials

## **Conditions to Avoid**

Extremes of temperature and direct sunlight. Dust accumulation. Avoid contact with moisture and water.

## Incompatible materials

May react violently with strong acids. In contact with water, reaction may generate enough heat to ignite combustible materials. In contact with metals, reaction may produce flammable and explosive hydrogen gas. May react with organohalogen compounds to form spontaneously combustible compounds. May react explosively in contact with nitro and chloro organic compounds.

## **Hazardous Decomposition Products**

Under fire conditions this product may emit toxic and/or irritating fumes and gases including oxides of sodium.

## Possibility of hazardous reactions

Reacts violently with acids. Reacts exothermically on dilution with water.

#### 11. TOXICOLOGICAL INFORMATION

# **Toxicology Information**

Toxicity data for material given below.

## **Acute Toxicity - Oral**

LD50 (rabbit): 325 mg/kg

#### Ingestion

Ingestion of this product will cause nausea, vomiting, abdominal pain and chemical burns to the mouth, throat and stomach.

#### Inhalation

Dust generated will cause irritation with possible burns to the mucous membrane and upper airways. Symptoms may include coughing, lesions of the nasal septum, severe pain and may lead to permanent tissue scarring.

#### Skin

Causes burns. Corrosive to the skin. Skin contact can cause redness, itching, irritation, severe pain and chemical burns with resultant tissue destruction.

Skin corrosion/irritation:

Skin, rabbit - 500 mg / 24h SEVERE

#### Eve

Causes eye damage. Eye contact will cause stinging, blurring, tearing, severe pain and possible burns, necrosis, permanent damage and blindness.

Serious eye damage/eye irritation:

Eye, rabbit - 0.05 mg / 24h SEVERE

Eye, rabbit - 1mg / 30s rinsed SEVERE

#### Respiratory sensitisation

Not expected to be a respiratory sensitiser.

#### **Skin Sensitisation**

Not expected to be a respiratory sensitiser.

## Germ cell mutagenicity

Not considered to be a mutagenic hazard.

## Carcinogenicity

Not considered to be a carcinogenic hazard.

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

## **Reproductive Toxicity**

Not considered to be toxic to reproduction.

#### STOT-single exposure

Not expected to cause toxicity to a specific target organ.

## STOT-repeated exposure

Not expected to cause toxicity to a specific target organ.

## **Aspiration Hazard**

Not expected to be an aspiration hazard.

# 12. ECOLOGICAL INFORMATION

## **Ecotoxicity**

The available ecological data is given below. Harmful to aquatic life.

## Persistence and degradability

Not available

# Mobility

Not available

# **Bioaccumulative Potential**

Not available

#### **Other Adverse Effects**

Not available

# **Environmental Protection**

Do not discharge this material into waterways, drains and sewers.

#### **Acute Toxicity - Fish**

LC50 (Gambusia affinis (Mosquito fish)): - 125 mg/L/96h

LC50 (Oncorhynchus mykiss (Rainbow trout)): - 45.4 mg/L/96h

# **Acute Toxicity - Daphnia**

EC50 (Daphnia (Water flea)): - 40.38 mg/L/48h

## 13. DISPOSAL CONSIDERATIONS

## **Disposal considerations**

Dispose of waste according to applicable local and national regulations. Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected. Wastes including emptied containers are controlled wastes and should be disposed of in accordance with all applicable local and national regulations.

## 14. TRANSPORT INFORMATION

#### **Transport Information**

Road and Rail:

This material is classified as a Class 8 Corrosive Substances Dangerous Goods

Class 8 Dangerous Goods are incompatible in a placard load with any of the following:

- Class 1: Explosives
- Division 4.3: Dangerous when wet Substances
- Division 5.1: Oxidising substances
- Division 5.2: Organic peroxides
- Class 6, Toxic or Infectious Substances, if the Class 6 dangerous goods are cyanides and the Class 8 dangerous goods are acids

Class 7: Radioactive materials unless specifically exempted

and are incompatible with food and food packaging in any quantity.

Strong acids must not be loaded in the same freight container or on the same vehicle with strong alkalis. Packing Group I and II acids and alkalis should be considered as strong.

## Marine Transport (IMO/IMDG):

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Class/Division: 8

UN No: 1823

Proper Shipping Name: SODIUM HYDROXIDE, SOLID

Packing Group: II EMS: F-A, S-B

Special Provisions: None

#### Air Transport (ICAO/IATA):

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for

transport by air. Class/Division: 8 UN No: 1823

Proper Shipping Name: Sodium hydroxide, solid

Packing Group: II

Packaging Instructions (passenger & cargo): 859

Packaging Instructions (cargo only): 863

Hazard Label: Corrosive Special Provisions: none

## **U.N. Number**

1823

## **UN proper shipping name**

SODIUM HYDROXIDE, SOLID

## Transport hazard class(es)

8

# **Packing Group**

Ш

# **Hazchem Code**

2W

#### **IERG Number**

37

# **IMDG Marine pollutant**

No

## **Transport in Bulk**

Not available

# **Special Precautions for User**

Not available

## 15. REGULATORY INFORMATION

#### **Regulatory information**

Classified as Hazardous according to the Globally Harmonised System of classification and labelling of chemicals (GHS) including Work, Health and Safety regulations, Australia

Classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

#### **Poisons Schedule**

S6

#### Australia (AICS)

All components of this product are listed on the Inventory or exempted.

## **16. OTHER INFORMATION**

## Date of preparation or last revision of SDS

SDS created: July 2017

#### References

Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice.

Standard for the Uniform Scheduling of Medicines and Poisons.

Australian Code for the Transport of Dangerous Goods by Road & Rail.

Model Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.

Workplace exposure standards for airborne contaminants.

Adopted biological exposure determinants, American Conference of Industrial Hygienists (ACGIH).

Globally Harmonised System of classification and labelling of chemicals.

#### **Contact Person/Point**

Chemist: Tel No: (08) 6272-3800 Emergency: Tel No: 0438 916 539

## **END OF SDS**

© Copyright Chemical Safety International Pty Ltd

Copyright in the source code of the HTML, PDF, XML, XFO and any other electronic files rendered by an Infosafe system for Infosafe SDS displayed is the intellectual property of Chemical Safety International Pty Ltd.

Copyright in the layout, presentation and appearance of each Infosafe SDS displayed is the intellectual property of Chemical Safety International Pty Ltd.

The compilation of SDS's displayed is the intellectual property of Chemical Safety International Pty Ltd.

Copying of any SDS displayed is permitted for personal use only and otherwise is not permitted. In particular the SDS's displayed cannot be copied for the purpose of sale or licence or for inclusion as part of a collection of SDS without the express written consent of Chemical Safety International Pty Ltd.