SAFETY DATA SHEET

CAUSTIC SODA

Infosafe No.: LQ83U
ISSUED Date : 27/06/2022
ISSUED by: BONDALL PTY LTD

Section 1 - Identification

Product Identifier
CAUSTIC SODA

Product Code
2kg – 90102, 500g – 90100

Company Name
BONDALL PTY LTD (ABN 27 008 734 996)

Address
Australia:
Unit 2, 115 Belmont Avenue,
Belmont, WA 6104
===
New Zealand:
Owens Logistics,
3-5 Kahu Street,
Otahuhu, Auckland 2024

Telephone/Fax Number
Tel: Australia: +61 (8)6272 3800 / New Zealand: 0800 474 773
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.

Illicit Drug Precursors
This product contains a Category III: Illicit Drug Reagent/Essential Chemical in the Code of Practice for Supply Diversion into Illicit Drug Manufacture.

Section 2 - Hazard(s) 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
Skin corrosion/irritation: Category 1A
Eye damage/irritation: Category 1
Specific target organ toxicity (single exposure): Category 3 (Respiratory tract irritation)
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.

H335 May cause respiratory irritation.
H402 Harmful to aquatic life.

Pictogram (s)
Corrosion,Exclamation mark

Precautionary Statement – Prevention
P234 Keep only in original packaging.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
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): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P363 Wash contaminated clothing before reuse.
P304+P340 IF INHALED: Remove person to fresh air and keep 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.
P312 Call a POISON CENTER/doctor if you feel unwell.
P390 Absorb spillage to prevent material damage.

Precautionary Statement – Storage
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P406 Store in a corrosion resistant container with a resistant inner liner.

Precautionary Statement – Disposal
P501 Dispose of contents/container to an approved waste disposal plant.

Section 3 - Composition and Information on Ingredients

Ingredients

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

Section 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
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. Can cause corneal burns.

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

Section 5 - Firefighting 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. In case of fire the product may be violently or explosively reactive. Use water spray to disperse vapours. This product should be prevented from entering drains and watercourses.

Section 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.

Section 7 - Handling and Storage

Precautions for Safe Handling
Corrosive solids. 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, bases/acids and foodstuffs. Keep containers closed when not in use, securely sealed and protected against physical damage. 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.

Section 8 - Exposure Controls and 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.

Source: Safe Work Australia

Biological Monitoring
No biological limits allocated.

Control Banding
Not available

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 a full-face respirator with multi-purpose combination or type ABEK respirator cartridges. 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 and Face 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.

Thermal Hazards
No further relevant information available.

Body Protection
Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron or equivalent chemical impervious outer garment and rubber boots is recommended where large quantities are handled.

Section 9 - Physical and Chemical Properties

Properties	Description	Properties	Description
Form	Solid	**Appearance**	Solid, pearl
Colour	White	**Odour**	Odourless
Melting Point	318 °C	**Boiling Point**	1390 °C
Decomposition Temperature	Not available	**Solubility in Water**	1.260 g/L (20 °C)
pH	14 (5% solution)	**Vapour Pressure**	Not available
Relative 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 (log value)**	Not available
Density	2.13 g/cm³	**Flash Point**	Not applicable
Flammability	Non-flammable	**Auto-Ignition Temperature**	Not available
Explosion Limit - Upper	Not available	**Explosion Limit - Lower**	Not available

Section 10 - Stability and Reactivity

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

Chemical Stability
Stable under normal storage conditions. Hygroscopic. Slowly absorbs moisture from air.

Possibility of hazardous reactions
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.

Conditions to Avoid
Extremes of temperature and direct sunlight. Avoid dust generation. Avoid exposure to moisture. Avoid contact with foodstuffs.

Incompatible Materials
Incompatible with ammonium salts, acids, chlorinated hydrocarbons, aluminium, zinc, lead, tin, and their alloys.

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

Hazardous Polymerization
Not available

Section 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, diarrhoea, 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, laryngitis, shortness of breath, spasms, inflammation and oedema of the larynx, the bronchi, pneumonitis and pulmonary oedema severe pain and may lead to permanent tissue scarring. May cause respiratory irritation. Inhalation of product dust can cause irritation of the nose, throat and respiratory system.

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

Eye
Causes eye damage. Eye contact will cause stinging, blurring, tearing, severe pain and possible burns, necrosis, corneal burns, 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 skin sensitiser.

Germ Cell Mutagenicity
Not considered to be a mutagenic hazard.

Carcinogenicity
Not considered to be a carcinogenic hazard.

IARC: 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
May cause respiratory irritation.

STOT - Repeated Exposure
Not expected to cause toxicity to a specific target organ.

Aspiration Hazard
Not expected to be an aspiration hazard.

Section 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

Hazardous to the Ozone Layer
This product is not expected to deplete the ozone layer.

Section 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. To minimise personal exposure, refer to Section 8 - Exposure Controls and Personal Protection.

Special Precautions for Incineration or Landfill
Contact a specialist disposal company or the local waste regulator for advice. Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to an approved waste facility. Processing, use or contamination of this product may change the waste management options.

Section 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

ADG U.N. Number
1823

ADG Proper Shipping Name
SODIUM HYDROXIDE, SOLID

ADG Transport Hazard Class
8

ADG Packing Group
II

Hazchem Code
2W

IERG Number
37

Special Precautions for User
Not available

IMDG Marine pollutant
No

Transport in Bulk
Not available

Section 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/AIIC)
All components of this product are listed on the Inventory or exempted.

Montreal Protocol
Not listed

Stockholm Convention
Not listed

Rotterdam Convention
Not listed

International Convention for the Prevention of Pollution from Ships (MARPOL)
Not available

Agricultural and Veterinary Chemicals Act 1994
Not available

Basel Convention
Not available

Section 16 - Any Other Relevant Information

Date of Preparation
SDS Reviewed: June 2022
Supersedes: July 2017

Version Number
2.0

Literature 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.
Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.
Code of Practice for Supply Diversion into Illicit Drug Manufacture.
National Code of Practice for Chemicals of Security Concern.
Agricultural Compounds and Veterinary Chemicals Act.
International Agency for Research on Cancer (IARC) Monographs.
Montreal Protocol on Substances that Deplete the Ozone Layer.
Stockholm Convention on Persistent Organic Pollutants (POPs).
Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade.
Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal.
International Air Transport Association (IATA) Dangerous Goods Regulations.
International Maritime Dangerous Goods (IMDG) Code.
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 (7th revised edition).
Code of Practice: Managing Noise and Preventing Hearing Loss at Work.

Contact Person/Point
Emergency Phone Number (24h)
AU: 1800 638 556, NZ: 0800 154 666

END OF SDS