SAFETY DATA SHEET

CAUSTIC SODA (NZ)

Infosafe No.: LQ83V ISSUED Date : 27/06/2022 ISSUED by: BONDALL PTY LTD

Section 1 - Identification

Product Identifier

CAUSTIC SODA (NZ)

Product Code

2kg - 90102, 500g - 90100

Company Name

BONDALL PTY LTD (ABN 27 008 734 996)

Address

New Zealand: Owens Logistics, 3-5 Kahu Street, Otahuhu, Auckland 2024

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Australia:

Unit 2, 115 Belmont Avenue,

Belmont, WA 6104

Telephone/Fax Number

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

Emergency Phone Number

NZ: 0800 154 666, AU: 1800 638 556

Recommended uses and any restrictions on use or supply

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

Section 2 - Hazard(s) Identification

GHS classification of the substance/mixture

Classified as Dangerous Goods for transport according to the New Zealand Standard NZS 5433:2020 Transport of Dangerous Goods on Land.

Classified as Hazardous according to the Hazardous Substances (Hazard Classification) Notice 2020, New Zealand.

Corrosive to metals: Category 1
Acute oral toxicity: Category 4
Acute dermal toxicity: Category 4
Skin corrosion/irritation: Category 1B
Serious eye damage Category 1

Signal Word (s)

DANGER

Hazard Statement (s)

H290 May be corrosive to metals
H302 Harmful if swallowed
H312 Harmful in contact with skin
H314 Causes severe skin burns and eye damage

Pictogram (s)

Corrosion, Exclamation mark



Precautionary Statement - Prevention

P234 Keep only in original packaging.

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

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

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

Precautionary Statement - Response

P310 Immediately call a POISON CENTER/doctor.

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.

P390 Absorb spillage to prevent material damage.

Precautionary Statement - Storage

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

Chemical Characterization

Solid

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 or a doctor at once. (0800 764 766)

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 Limits (OEL)

Sodium hydroxide

Ceiling: 2 mg/m3

Ceiling: A concentration that should not be exceeded during any part of the working day.

Source: Workplace Exposure Standards and Biological Exposure Indices.

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 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.

Eve 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
Decomposition Temperature	Not available	Melting Point	318 °C
Boiling Point	1390 °C	Solubility in Water	1.260 g/L (20 °C)
рН	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 ³	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.

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.

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.

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

Harmful if swallowed. 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.

Skin

Harmful in contact with skin. Product can be absorbed through skin with resultant harmful systemic effects. 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

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.

Section 12 - Ecological Information

Ecotoxicity

The available ecological data is given below.

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

Product Disposal:

Product wastes are controlled wastes and should be disposed of in accordance with all applicable local and national regulations. This product can be disposed through a licensed commercial waste collection service. The product should be rendered non-hazardous before being sent to a licensed landfill facility.

Personal protective clothing and equipment as specified in Section 8 of this SDS must be worn during handling and disposal of this product. The ventilation requirements as specified in the same section must also be followed, and the precautions given in Section 7 of this SDS regarding handling must also be followed. Do not dispose directly into the sewerage system. Do not discharge into drains or watercourses or dispose where ground or surface waters may be affected.

In New Zealand, the disposal agency or contractor must comply with the New Zealand Hazardous Substances (Disposal) Notice 2017. Further details regarding disposal can be obtained on the EPA New Zealand website under specific group standards.

Container Disposal:

The container or packaging must be cleaned and rendered incapable of holding any substance. It can then be disposed of in a manner consistent with that of the substance it contained. In this instance the packaging can be disposed through a commercial waste collection service.

Alternatively, the container or packaging can be recycled if the hazardous residues have been thoroughly cleaned or rendered non-hazardous.

In New Zealand, the packaging (that may or may not hold any residual substance) that is lawfully disposed of by householders or other consumers through a public or commercial waste collection service is a means of compliance with regulations.

Special precautions for landfill or incineration

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 Dangerous Goods Class 8 Corrosive Substances

Must not be loaded in the same freight container or on the same vehicle with:

- Class 1: Explosives
- Division 5.1: Oxidising substances
- Division 5.2: Organic peroxides

Class 7: Radioactive materials unless specifically exempted

-Food items.

Note 1: Cyanides (Division 6.1) must not be loaded in the same freight container or on the same vehicle with acids (Class 8).

Note 2: 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.

Must not be loaded with in the same freight container; and on the same vehicle must be separated horizontally by at least 3 metres unless all but one are packed in separate freight containers with:

- Division 4.3: Dangerous when wet Substances

Goods of packing group II or III may be loaded in the same freight container or on the same vehicle if transported in segregation devices with:

- Division 4.3: Dangerous when wet substances
- Division 5.1: Oxidising substances
- Division 5.2: Organic peroxides
- -Food items.

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

UN Number

1823

Proper Shipping Name

SODIUM HYDROXIDE, SOLID

Hazard Class

Q

Hazchem Code

21//

Special Precautions for User

Not available

Packing Group

Ш

IERG Number

37

IMDG Marine pollutant

Nο

Transport in Bulk

Not available

Section 15 - Regulatory Information

Regulatory Information

Classified as Hazardous according to the Hazardous Substances (Hazard Classification) Notice 2020, New Zealand.

Group Standard: Sodium hydroxide

HSNO Approval Number

HSR001547

Montreal Protocol

Not listed

Stockholm Convention

Not listed

Rotterdam Convention

Not listed

Agricultural Compounds, including Veterinary Medicines (ACVM)

Not available

Section 16 - Any Other Relevant Information

Date of preparation or last revision of SDS

SDS Reviewed: June 2022 Supersedes: July 2017

Literature References

Hazardous Substances and New Organisms Act (1996).

Health and Safety at Work (Hazardous Substances) Regulations {2017}.

Workplace Exposure Standards and Biological Exposure Indices.

Agricultural Compounds and Veterinary Medicines Act (1997).

 $\label{thm:condition} \mbox{Montreal Protocol on Substances that Deplete the Ozone Layer.}$

Stockholm Convention on Persistent Organic Pollutants (POPs).

Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade.

Transport of Dangerous goods on land NZS 5433.

Recommendations on the Transport of Dangerous Goods - Model Regulations.

Dangerous Goods Emergency Action Code List.

Hazardous Substances (Safety Data Sheets) Notice (2017). (EPA Consolidation)

Assigning a hazardous substance to a group standard.

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

Contact Person/Point

Emergency Phone Number

NZ: 0800 154 666, AU: 1800 638 556

END OF SDS

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