HALLIBURTON

SAFETY DATA SHEET

CAUSTIC SODA

Revision Date: 18-Apr-2014 **Revision Number:** 22

1. Product and Company Identification

Product Name

Product Trade Name: CAUSTIC SODA

Other Names

Synonyms: None

Product Code: HM003599

Recommended Use

Recommended Use pH Control

Uses Advised Against No information available

Company Name, Address and Contact Details

Manufacturer/Supplier Halliburton New Zealand
1 Paraite Rd,
Bell Block, New Plymouth
New Zealand Registration No.: 824207

E-Mail address: fdunexchem@halliburton.com

Emergency Telephone Number +64-6-7559274

New Zealand National Poisons Centre 0800 764 766 (24 hours)

2. Hazard(s) Identification

Statement of Hazardous Nature

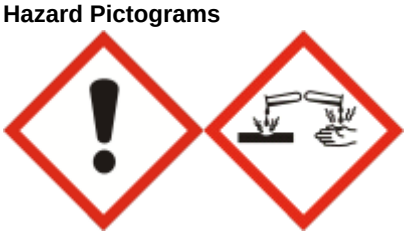
Classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulation 2001; Classified as dangerous good according to NZS 5433:2012, UN, IMDG or IATA

Classification

6.1D (Oral) Acutely Toxic Substances
6.1D (Dermal) Acutely Toxic Substances
8.1A Corrosive to metals
8.2B Corrosive to dermal tissue if exposed for greater than 3 mins
8.3A Corrosive to ocular tissue
9.1D Slightly harmful in the aquatic environment
9.3C Harmful to terrestrial vertebrates

Hazard and Precautionary Statements

Hazard Pictograms



Signal Word Danger

Hazard Statements

H290 - May be corrosive to metals
H302 - Harmful if swallowed
H312 - Harmful in contact with skin
H314 - Causes severe skin burns and eye damage
H315 - Causes skin irritation
H402 - Harmful to aquatic life
H433 - Harmful to the terrestrial vertebrates.

Precautionary Statements

Prevention

P101 - If medical advice is needed, have product container or label at hand
P102 - Keep out of reach of children
P103 - Read label before use
P104 - Read Safety Data Sheet before use
P234 - Keep only in original container
P260 - Do not breathe dust/fume/gas/mist/vapors/spray
P264 - Wash face, hands and any exposed skin thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P280 - Wear protective gloves/eye protection/face protection

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/shower
P363 - Wash contaminated clothing before reuse
P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing
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
P390 - Absorb spillage to prevent material damage

Storage

P405 - Store locked up

Disposal

P501 - Dispose of contents/container to an approved landfill

Contains

Substances	CAS Number	Substance HSNO Classification
Sodium hydroxide	1310-73-2	6.1D (Oral) 6.1D (Dermal) 8.1A 8.2B 8.3A 9.1D (Crustacean, Fish) 9.3C

2.3 Other Hazards

None known

3. Composition and Information on Ingredients

Substances	CAS Number	PERCENT (w/w)
Sodium hydroxide	1310-73-2	60 - 100%

4. First-Aid Measures

Requirements for First Aid or Medical Care

Inhalation If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention.

Eyes In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.

Skin In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention. Remove contaminated clothing and launder before reuse. Destroy or properly dispose of contaminated shoes.

Ingestion Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.

Workplace Facilities Required
None

Relation to Health Effect
Most Important Symptoms/Effects
May cause eye, skin, and respiratory burns.

Medical Attention and Special Treatment
Notes to Physician
Treat symptomatically

5. Fire-fighting measures

Type of Hazard
Flammability Hazard
Non-flammable

5.1 Extinguishing media
Suitable Extinguishing Media
All standard fire fighting media
Extinguishing media which must not be used for safety reasons
None known.

HAZCHEM Code
Hazchem Code: 2R

Special Protective Equipment and Precautions for Fire Fighters
Special Protective Equipment for Fire-Fighters
Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.
Special Exposure Hazards
May form explosive mixtures with strong acids. Reaction with steel and certain other metals generates flammable hydrogen gas.

6. Spillage, Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures
Use appropriate protective equipment. Avoid creating and breathing dust.
See Section 8 for additional information

6.2 Environmental precautions
Prevent from entering sewers, waterways, or low areas.

6.3 Methods and material for containment and cleaning up
Neutralize to pH of 6-8. Scoop up and remove.

6.4 Reference to other sections
See Section 8 and 13 for additional information.

7. Handling and Storage

7.1 Precautions for Safe Handling
Handling Precautions
Avoid contact with eyes, skin, or clothing. Avoid creating or inhaling dust.

Handling Practices
Hygiene Measures
Handle in accordance with good industrial hygiene and safety practice

Approved Handlers
This product does NOT require an approved handler.

7.2 Conditions for safe storage, including any incompatibilities
Store away from acids. Store in a cool, dry location. Store locked up.

Store Site Requirements
No special controls required

Packaging
No special packaging required

8. Exposure Controls and Personal Protection

Workplace Exposure Standards

Exposure Limits

Substances	CAS Number	New Zealand WES	ACGIH TLV-TWA
Sodium hydroxide	1310-73-2	Not applicable	2 mg/m³

Engineering Controls

Engineering Controls Use in a well ventilated area. Localized ventilation should be used to control dust levels.

Personal Protective Equipment (PPE)

Respiratory Protection Wear a NIOSH certified, European Standard EN 149 (FFP2/FFP3), AS/NZS 1715, or equivalent respirator when using this product.

Hand Protection Impervious rubber gloves. Nitrile gloves. Butyl rubber gloves.
Skin Protection Full protective chemical resistant clothing. Rubber boots.
Eye Protection Chemical goggles; also wear a face shield if splashing hazard exists.
Other Precautions Eyewash fountains and safety showers must be easily accessible.
Hygiene Measures Handle in accordance with good industrial hygiene and safety practice

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Physical State: Solid **Color:** White to off white
Odor: Odorless **Odor Threshold:** No information available

Property	Values	Remarks/ - Method
pH:	14	
Freezing Point/Range	No data available	
Melting Point/Range	No data available	
Boiling Point/Range	1390 °C	
Flash Point	No data available	
Evaporation rate	No data available	
Vapor Pressure	No data available	
Vapor Density	No data available	
Specific Gravity	2.13	
Water Solubility	Soluble in water	
Solubility in other solvents	No data available	
Partition coefficient: n-octanol/water	No data available	
Autoignition Temperature	No data available	
Decomposition Temperature	No data available	
Viscosity	No data available	
Explosive Properties	No information available	
Oxidizing Properties	No information available	

9.2 Other information

Molecular Weight 40
VOC Content (%) No data available

10. Stability and Reactivity

10.2 Chemical Stability

Stable

10.4 Conditions to Avoid
None anticipated

10.5 Incompatible Materials
Contact with acids. Peroxides. Halogenated compounds. Prolonged contact with aluminum, lead, or zinc may liberate flammable hydrogen.

10.6 Hazardous Decomposition Products
None known.

Hazardous Reactions
Hazardous Polymerization: Will Not Occur

11. Toxicological Information

Health Effect from Likely Routes of Exposure
Acute Toxicity

Inhalation	Causes severe respiratory burns. May cause chemical pneumonia.
Eye Contact	May cause eye burns.
Skin Contact	Causes severe burns.
Ingestion	Causes burns of the mouth, throat and stomach.

Chronic Effects/Carcinogenicity Prolonged, excessive exposure may cause erosion of the teeth.

Toxicity Data

Toxicology data for the components

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium hydroxide	1310-73-2	No data available	1350 mg/kg (Rabbit)	No data available

12. Ecological Information

12.1 Toxicity
Ecotoxicity Effects

Product Ecotoxicity Data
No data available

Substance Ecotoxicity Data

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
Sodium hydroxide	1310-73-2	No information available	LC50: 45.4 mg/l (Oncorhynchus mykiss)	No information available	EC50(48 h): 40.4 mg/L (Ceriodaphnia sp.)

12.2 Persistence and degradability
The methods for determining biodegradability are not applicable to inorganic substances.

12.3 Bioaccumulative potential
Does not bioaccumulate

12.4 Mobility in soil
No information available

Ecotoxicity Hazard Statements
Harmful to aquatic life
Harmful to terrestrial vertebrates.

12.6 Other adverse effects

Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors

13. Disposal Considerations

13.1 Waste treatment methods

Disposal Method Disposal should be made in accordance with federal, state, and local regulations.

Contaminated Packaging Follow all applicable national or local regulations. Contaminated packaging may be disposed of by: rendering packaging incapable of containing any substance, or treating packaging to remove residual contents, or treating packaging to make sure the residual contents are no longer hazardous, or by disposing of packaging into commercial waste collection.

14. Transport Information

IMDG/IMO

UN Number:	UN1823
UN Proper Shipping Name:	Sodium Hydroxide, Solid
Transport Hazard Class(es):	8
Packing Group:	II
Environmental Hazards:	Not applicable
EMS:	EmS F-A, S-B

NZ 5433.1999

UN Number:	UN1823
UN Proper Shipping Name:	Sodium Hydroxide, Solid
Transport Hazard Class(es):	8
Packing Group:	II

IATA/ICAO

UN Number:	UN1823
UN Proper Shipping Name:	Sodium Hydroxide, Solid
Transport Hazard Class(es):	8
Packing Group:	II

Special Precautions for User None

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable

15. Regulatory Information

New Zealand Inventory of Chemicals All components listed on inventory or are exempt.

HSNO Approval Number HSR001547

Group Name Not Applicable

HSNO Controls Refer to the NZ EPA website for more information: http://www.epa.govt.nz

Approved Handlers Not Applicable

Poisons Schedule: None Allocated

16. Other information, including date of preparation or last revision

The following sections have been revised since the last issue of this SDS

Not applicable

Additional information

For additional information on the use of this product, contact your local Halliburton representative.

For questions about the Safety Data Sheet for this or other Halliburton products, contact Chemical Compliance at 1-580-251-4335.

Key literature references and sources for data
www.ChemADVISOR.com/
NZ CCID

Revision Date: 18-Apr-2014
Revision Note
Not applicable

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End of Safety Data Sheet