HALLIBURTON

SAFETY DATA SHEET

CAUSTIC SODA LIQUID - 50%

Revision Date: 05-Mar-2014

Revision Number: 16

1. Product and Company Identification

Product Name Product Trade Name: CAUSTIC SODA LIQUID - 50% **Other Names** Synonyms: None **Product Code:** HM000193 **Recommended Use Recommended Use** pH Control **Uses Advised Against** No information available **Company Name, Address and Contact Details** Halliburton New Zealand Manufacturer/Supplier 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** 0800 764 766 (24 hours) Centre

2. Hazard(s) Identification

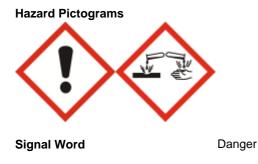
Statement of Hazardous Nature

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 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 H318 - Causes serious eye damage 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 waste disposal plant

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	30 - 60%		

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:

em Code:

Special Protective Equipment and Precautions for Fire Fighters

2R

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.

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

Isolate spill and stop leak where safe. Contain spill with sand or other inert materials. 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 breathing vapors. Wash hands after use. Launder contaminated clothing before reuse.

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 well ventilated area. Keep container closed when not in use. Product has a shelf life of 12 months. 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/m ³

Engineering Controls

Engineering Controls

Use in a well ventilated area. Local exhaust ventilation should be used in areas without good cross ventilation.

Personal Protective Equipment (PPE)

Respiratory Protection	Dust/mist respirator. (N95, P2/P3)
Hand Protection	Impervious rubber gloves.
Skin Protection	Full protective chemical resistant clothing.
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: Liquid	Color:	Clear colorless
Odor: Odorless		No information available
Property	Values	
Remarks/ - Method		
pH:	14	
Freezing Point/Range	12 °C	
Melting Point/Range	No data available	
Boiling Point/Range	144 °C	
Flash Point	No data available	
Evaporation rate	No data available	
Vapor Pressure	No data available	
Vapor Density	No data available	
Specific Gravity	1.52	
Water Solubility	Miscible with wate	r
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 ava	ailable
Oxidizing Properties	No information ava	ailable
9.2 Other information		
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

Strong acids. Peroxides. Halogenated compounds. Amphoteric metals such as aluminum, magnesium, lead, tin, or zinc.

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.
Eve Contact	Causes severe eve 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. Substance should NOT be deposited into a sewage facility.	
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: UN Proper Shipping Name: Transport Hazard Class(es): Packing Group: EMS:	UN1824, Sodium Hydroxide Solution , 8 , II EmS F-A, S-B
NZ 5433.1999 UN Number: UN Proper Shipping Name: Transport Hazard Class(es): Packing Group:	UN1824, Sodium Hydroxide Solution , 8 , II
IATA/ICAO UN Number: UN Proper Shipping Name: Transport Hazard Class(es): Packing Group:	UN1824, Sodium Hydroxide Solution , 8 , II

 Special Precautions for User
 None

 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
 Note

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:	S6	

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:	05-Mar-2014
Revision Note	
Not applicable	

Disclaimer Statement

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End of Safety Data Sheet