

MATERIAL SAFETY DATA SHEET

Product Trade Name: CAUSTIC SODA LIQUID - 50%

Revision Date: 20-Dec-2012

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Statement of Hazardous Nature Hazardous according to the criteria of NOHSC, Dangerous Goods according to the criteria of ADG.

Manufacturer/Supplier Halliburton Australia Pty. Ltd.
15 Marriott Road
Jandakot
WA 6164
Australia

ACN Number: 009 000 775
Telephone Number: 61 (08) 9455 8300
Fax Number: 61 (08) 9455 5300

Product Emergency Telephone

Australia: 08-64244950
Papua New Guinea: 05 1 281 575 5000
NewZealand: 06-7559274

Fire, Police & Ambulance - Emergency Telephone

Australia: 000
Papua New Guinea: 000
New Zealand: 111

Identification of Substances or Preparation

Product Trade Name: CAUSTIC SODA LIQUID - 50%
Synonyms: None
Chemical Family: Hydroxide
UN Number: , UN1824
Dangerous Goods Class: 8
Subsidiary Risk: None
Hazchem Code: 2R
Poisons Schedule: S6
Application: pH Control

Prepared By Chemical Compliance
Telephone: 1-580-251-4335
e-mail: fdunexchem@halliburton.com

2. COMPOSITION/INFORMATION ON INGREDIENTS

Substances	CAS Number	PERCENT	Australia NOHSC	New Zealand WES	ACGIH TLV-TWA
Sodium hydroxide	1310-73-2	30 - 60%	2 mg/m ³	Not applicable	2 mg/m ³

Non-Hazardous Substance to Total of 100%

3. HAZARDS IDENTIFICATION

Hazard Overview	May cause eye, skin, and respiratory burns. May be harmful if swallowed.
Risk Phrases	R35 Causes severe burns.
HSNO Classification	Not Determined

4. FIRST AID MEASURES

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.
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.
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.
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.
Notes to Physician	Not Applicable

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media	All standard fire fighting media
Extinguishing media which must not be used for safety reasons	None known.
Special Exposure Hazards	May form explosive mixtures with strong acids. Reaction with steel and certain other metals generates flammable hydrogen gas.
Special Protective Equipment for Fire-Fighters	Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures	Use appropriate protective equipment.
Environmental Precautionary Measures	Prevent from entering sewers, waterways, or low areas.
Procedure for Cleaning / Absorption	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.

7. HANDLING AND STORAGE

Handling Precautions	Avoid contact with eyes, skin, or clothing. Avoid breathing vapors. Wash hands after use. Launder contaminated clothing before reuse.
Storage Information	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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid
Color:	Clear colorless
Odor:	Odorless
pH:	14
Specific Gravity @ 20 C (Water=1):	1.52
Density @ 20 C (kg/l):	1.52
Bulk Density @ 20 C (kg/m³):	Not Determined
Boiling Point/Range (C):	144
Freezing Point/Range (C):	12
Pour Point/Range (C):	Not Determined
Flash Point/Range (C):	Not Determined
Flash Point Method:	Not Determined
Autoignition Temperature (C):	Not Determined
Flammability Limits in Air - Lower (g/m³):	Not Determined
Flammability Limits in Air - Lower (%):	Not Determined
Flammability Limits in Air - Upper (g/m³):	Not Determined
Flammability Limits in Air - Upper (%):	Not Determined
Vapor Pressure @ 20 C (mmHg):	13 @ 60C
Vapor Density (Air=1):	Not Determined
Percent Volatiles:	< 50
Evaporation Rate (Butyl Acetate=1):	Not Determined
Solubility in Water (g/100ml):	Miscible
Solubility in Solvents (g/100ml):	Soluble in alcohols
VOCs (g/l):	Not Determined
Viscosity, Dynamic @ 20 C (centipoise):	Not Determined
Viscosity, Kinematic @ 20 C (centistokes):	Not Determined
Partition Coefficient/n-Octanol/Water:	Not Determined
Molecular Weight (g/mole):	40
Decomposition Temperature (C):	Not Determined

10. STABILITY AND REACTIVITY

Stability Data:	Stable
Hazardous Polymerization:	Will Not Occur
Conditions to Avoid	None anticipated
Incompatibility (Materials to Avoid)	Strong acids. Peroxides. Halogenated compounds. Amphoteric metals such as aluminum, magnesium, lead, tin, or zinc.
Hazardous Decomposition Products	None known.

Additional Guidelines

Not Applicable

11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure Eye or skin contact, inhalation.

Symptoms related to exposure

Inhalation Causes severe respiratory burns.

Skin Contact Causes severe burns.

Eye Contact Causes severe eye burns.

Ingestion Causes burns of the mouth, throat and stomach.

Aggravated Medical Conditions Skin disorders.

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

Other Information None known.

Toxicity Tests

Oral Toxicity: LD50: 140-340 mg/kg (Rat)

Dermal Toxicity: LD50: 1350 mg/kg (Rabbit)

Inhalation Toxicity: Not determined

Primary Irritation Effect: Not determined

Carcinogenicity Not determined

Genotoxicity: Not determined

Reproductive / Not determined

Developmental Toxicity:

12. ECOLOGICAL INFORMATION

Mobility (Water/Soil/Air) Not determined

Persistence/Degradability Not determined

Bio-accumulation Not determined

Ecotoxicological Information

Acute Fish Toxicity: Not determined

Acute Crustaceans Toxicity: Not determined

Acute Algae Toxicity: Not determined

Chemical Fate Information Not determined

Other Information Not applicable

13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORT INFORMATION**Land Transportation****ADR**

UN1824,Sodium Hydroxide Solution, 8, II

Air Transportation**ICAO/IATA**

UN1824,Sodium Hydroxide Solution, 8, IIRQ (Sodium Hydroxide - 908 kg.)

Sea Transportation**IMDG**UN1824,Sodium Hydroxide Solution, 8, IIRQ (Sodium Hydroxide - 908 kg.)
EmS F-A, S-B**Other Transportation Information**

Labels: Corrosive

15. REGULATORY INFORMATION**Chemical Inventories****Australian AICS Inventory**

All components listed on inventory or are exempt.

New Zealand Inventory of Chemicals

All components listed on inventory or are exempt.

US TSCA Inventory

All components listed on inventory or are exempt.

EINECS Inventory

This product, and all its components, complies with EINECS

Classification

C - Corrosive.

Risk Phrases

R35 Causes severe burns.

Safety Phrases

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S45 In case of accident or if you feel unwell, seek medical advice immediately.

S1/2 Keep locked up and out of reach of children.

S37/39 Wear suitable gloves and eye/face protection.

16. OTHER INFORMATION**The following sections have been revised since the last issue of this SDS**

Not applicable

Contact

Australian Poisons Information Centre

24 Hour Service: - 13 11 26

Police or Fire Brigade: - 000 (exchange): - 1100

New Zealand National Poisons Centre

0800 764 766

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.

Disclaimer Statement

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*****END OF MSDS*****