

MATERIAL SAFETY DATA SHEET

Product Trade Name: Mud Flush III Liquid

Revision Date: 07-Oct-2013

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

Statement of Hazardous Nature Hazardous according to the criteria of NOHSC, Non-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: Mud Flush III Liquid
Synonyms: None
Chemical Family: Lignosulfonate
UN Number: None
Dangerous Goods Class: None
Subsidiary Risk: None
Hazchem Code: None Allocated
Poisons Schedule: None Allocated
Application: Cement Pre-Flush

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

2. COMPOSITION/INFORMATION ON INGREDIENTS

Substances	CAS Number	PERCENT (w/w)	Australia NOHSC	New Zealand WES	ACGIH TLV-TWA
Sodium methyl oleoyl taurate	137-20-2	10 - 30%	Not applicable	Not applicable	Not applicable

2-Ethyl hexanol	104-76-7	1 - 5%	TWA: 50 ppm TWA: 266 mg/m ³	TWA: 50 ppm TWA: 266 mg/m ³	TWA: 50 ppm
Sodium tetraborate	1330-43-4	0 - 1%	TWA: 1 mg/m ³	TWA: 1 mg/m ³	TWA: 2 mg/m ³ STEL: 6 mg/m ³

Non-Hazardous Substance to Total of 100%

3. HAZARDS IDENTIFICATION

Hazard Overview May cause eye, skin, and respiratory irritation. Potential reproductive hazard.

Risk Phrases

R41 Risk of serious damage to eyes.
R38 Irritating to skin.
R60 May impair fertility.
R61 May cause harm to the unborn child.

HSNO Classification

6.1E (Oral) Acutely Toxic Substances
6.3B Mildly irritating to the skin
6.8B Human reproductive or developmental toxicants

4. FIRST AID MEASURES

Inhalation If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

Skin Wash with soap and water. Get medical attention if irritation persists. Remove contaminated clothing and launder before reuse.

Eyes Immediately flush eyes with large amounts of water for at least 15 minutes. Get immediate medical attention.

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
Water fog, carbon dioxide, foam, dry chemical.

Extinguishing media which must not be used for safety reasons
None known.

Special Exposure Hazards Decomposition in fire may produce toxic gases.

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. Scoop up and remove.

7. HANDLING AND STORAGE

Handling Precautions

Avoid contact with eyes, skin, or clothing. Avoid breathing vapors.

Storage Information

Store away from oxidizers. Keep container closed when not in use. Store locked up. Product has a shelf life of 24 months.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls

Use in a well ventilated area.

Respiratory Protection

If engineering controls and work practices cannot keep exposure below occupational exposure limits or if exposure is unknown, wear a NIOSH certified, European Standard EN 149, or equivalent respirator when using this product. Selection of and instruction on using all personal protective equipment, including respirators, should be performed by an Industrial Hygienist or other qualified professional.

Dust/mist respirator. (N95, P2/P3)

Hand Protection

Neoprene gloves. Nitrile gloves. Viton gloves Impervious rubber gloves.

Skin Protection

Normal work coveralls. Rubber apron.

Eye Protection

Wear safety glasses or goggles to protect against exposure.

Other Precautions

Eyewash fountains and safety showers must be easily accessible.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:

Liquid

Color:

Light brown

Odor:

Mild

pH:

9

Specific Gravity @ 20 C (Water=1):

1.19

Density @ 20 C (kg/l):

1.165

Bulk Density @ 20 C (kg/M3):

Not Determined

Boiling Point/Range (C):

Not Determined

Freezing Point/Range (C):

Not Determined

Pour Point/Range (C):

Not Determined

Flash Point/Range (C):

Not Determined **Min:** > 98

Flash Point Method:

PMCC

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):

Not Determined

Vapor Density (Air=1):

Not Determined

Percent Volatiles:

Not Determined

Evaporation Rate (Butyl Acetate=1):

Not Determined

Solubility in Water (g/100ml):

Soluble

Solubility in Solvents (g/100ml):

Not Determined

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):	Not Determined
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 oxidizers. Strong acids. Prolonged contact with aluminum, lead or zinc. Strong alkalis.
Hazardous Decomposition Products	Oxides of sulfur. Carbon monoxide and carbon dioxide.
Additional Guidelines	Not Applicable

11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure	Eye or skin contact, inhalation.
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Symptoms related to exposure

Acute Toxicity

Product Information

Based on the collective toxicity of product ingredients, the mixture should be considered to cause the following:

Inhalation

May cause mild respiratory irritation.

Eye Contact

May cause mild eye irritation.

Skin Contact

May cause skin irritation.

Ingestion

Irritation of the mouth, throat, and stomach.

Chronic Effects/Carcinogenicity

May cause reproductive effects based on animal studies. Prolonged or repeated exposure may cause embryo and fetus toxicity.

Toxicology data for the components

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium methyl oleoyl taurate	137-20-2	1700 mg/kg (Rat)	No data available	No data available
2-Ethyl hexanol	104-76-7	5190 µL/kg (Rat) 1516-2774 mg/kg (Rat) 1480 mg/kg (Rat) 600 mg/kg (Guinea pig)	5660 µL/kg (Rabbit) 2520 mg/kg (Rabbit) 1980 mg/kg (Rabbit)	227 ppm (Rat) 6h
Sodium tetraborate	1330-43-4	2403 mg/kg (Rat)	2000 mg/kg (Rabbit)	No data available

12. ECOLOGICAL INFORMATION

Ecotoxicological Information

Ecotoxicity Product

Acute Fish Toxicity: Not determined

Acute Crustaceans Toxicity: Not determined

Acute Algae Toxicity: Not determined

Ecotoxicity Substance

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Sodium methyl oleoyl taurate	137-20-2	No information available	No information available	No information available	No information available
2-Ethyl hexanol	104-76-7	EC50: 11.5 mg/L (Desmodesmus subspicatus)	LC50: 32-37 mg/L (Oncorhynchus mykiss) LC50: 10 - 33 mg/L (Lepomis macrochirus)	No information available	TLM96: > 10000 mg/l (Crangon crangon) EC50 39 mg/L (Daphnia magna)
Sodium tetraborate	1330-43-4	No information available	No information available	No information available	LC50: 141 mg/L (Daphnia magna)

12.2 Persistence and degradability

No information available

12.3 Bioaccumulative potential

No information available

12.4 Mobility in soil

No information available

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Other adverse effects

13. DISPOSAL CONSIDERATIONS

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

Land Transportation

ADR

Not restricted

Air Transportation

ICAO/IATA

Not restricted

Sea Transportation

IMDG

Not restricted

Other Transportation Information

Labels:

None

15. REGULATORY INFORMATION

Chemical Inventories

Australian AICS Inventory
New Zealand Inventory of Chemicals
US TSCA Inventory
EINECS Inventory

All components listed on inventory or are exempt.
All components listed on inventory or are exempt.
All components listed on inventory or are exempt.
This product, and all its components, complies with EINECS

Classification

Xn - Harmful.

Risk Phrases

R41 Risk of serious damage to eyes.
R38 Irritating to skin.
R60 May impair fertility.
R61 May cause harm to the unborn child.

Safety Phrases

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/39 Wear suitable protective clothing 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*****