HALLIBURTON

MATERIAL SAFETY DATA SHEET

Product Trade Name: K-38

Revision Date: 26-Mar-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: K-38
Synonyms: None
Chemical Family: Mineral
UN Number: None
Dangerous Goods Class: None
Subsidiary Risk: None

Hazchem Code: None Allocated

Poisons Schedule: S5

Application: Crosslinker

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
Disodium octaborate tetrahydrate	12008-41-2	60 - 100%	Not applicable	Not applicable	2 mg/m ³

Non-Hazardous Substance to Total of 100%

HAZARDS IDENTIFICATION

Hazard Overview May cause eye, skin, and respiratory irritation. May be harmful if swallowed. Potential

reproductive hazard.

Risk Phrases R60 May impair fertility.

R61 May cause harm to the unborn child.

HSNO Classification Not Determined

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.

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes Eyes

and get medical attention if irritation persists.

Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek Ingestion

medical attention. Never give anything by mouth to an unconscious person.

Notes to Physician Not Applicable

FIRE FIGHTING MEASURES

Suitable Extinguishing Media Water fog, carbon dioxide, foam, dry chemical.

Extinguishing media which must None known.

not be used for safety reasons

Special Exposure Hazards Not applicable.

Fire-Fighters

Special Protective Equipment for Full protective clothing and approved self-contained breathing apparatus required for

fire fighting personnel.

ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures Use appropriate protective equipment. Avoid creating and breathing dust.

Environmental Precautionary

Measures

None known.

Procedure for Cleaning /

Absorption

Scoop up and remove.

HANDLING AND STORAGE

Handling Precautions Avoid creating or inhaling dust. Store in a cool, dry location. **Storage Information**

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls Use in a well ventilated area.

Respiratory Protection Not normally needed. But if significant exposures are possible then the following

> respirator is recommended: Dust/mist respirator. (N95, P2/P3)

Hand Protection Normal work gloves.

Skin Protection Normal work coveralls.

Eye Protection Dust proof goggles.

Other Precautions None known.

PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid Color: White Odor: Odorless pH: 7.3 Specific Gravity @ 20 C (Water=1): 1.7

Density @ 20 C (kg/l): Not Determined Bulk Density @ 20 C (kg/m³): Not Determined Not Determined **Boiling Point/Range (C):** Freezing Point/Range (C): Not Determined 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): Not Determined Vapor Density (Air=1): Not Determined **Percent Volatiles:** Not Determined Evaporation Rate (Butyl Acetate=1): Not Determined

Solubility in Water (g/100ml): 95

Solubility in Solvents (g/100ml): Not Determined Not Determined VOCs (g/l): Not Determined Viscosity, Dynamic @ 20 C (centipoise): 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

STABILITY AND REACTIVITY

Stability Data: Stable

Hazardous Polymerization: Will Not Occur **Conditions to Avoid** None known. None known. Incompatibility (Materials to

Avoid)

Hazardous Decomposition

Products

None known.

Additional Guidelines Not Applicable

11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure Eye or skin contact, inhalation.

Sympotoms related to exposure

Inhalation May cause respiratory irritation.

Skin Contact May cause mild skin irritation.

Eye Contact May cause mild eye irritation.

Ingestion May cause abdominal pain, vomiting, nausea, and diarrhea.

Aggravated Medical Conditions None known.

Chronic Effects/Carcinogenicity Prolonged or repeated exposure may cause reproductive system damage. Prolonged

or repeated exposure may cause embryo and fetus toxicity.

Other Information None known.

Toxicity Tests

Oral Toxicity: LD50: 2000 mg/kg (Rat)

Dermal Toxicity: Not determined

Inhalation Toxicity: Not determined

Primary Irritation Effect: Not determined

Carcinogenicity Not determined

Genotoxicity: Not determined

Reproductive /

Developmental Toxicity:

Not determined

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 InformationNot determinedOther InformationNot applicable

13. DISPOSAL CONSIDERATIONS

Disposal MethodBury in a licensed landfill according to federal, state, and local regulations.

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Contaminated Packaging

Follow all applicable national or local regulations.

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. This product does not comply with NZIOC

This product, and all its components, complies with EINECS

Classification Xn - Harmful.

Risk Phrases R60 May impair fertility.

R61 May cause harm to the unborn child.

Safety Phrases

S36/37 Wear suitable protective clothing and gloves.

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