HALLIBURTON

MATERIAL SAFETY DATA SHEET

Product Trade Name: CLAYFIX-II MATERIAL

Revision Date: 24-Apr-2013

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: CLAYFIX-II MATERIAL

Synonyms: None

Chemical Family: Organic Salt UN Number: , UN2810 Dangerous Goods Class: 6.1 Subsidiary Risk: None Hazchem Code: 2X

Hazchem Code:2XPoisons Schedule:S5Application:Additive

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
Alkylated quaternary chloride	Proprietary	30 - 60%	Not applicable	Not applicable	Not applicable
Potassium hydroxide	1310-58-3	0 - 1%	2 mg/m ³	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 fatal if swallowed.

Risk Phrases R21 Harmful in contact with skin.

R25 Toxic if swallowed.

Not Determined **HSNO Classification**

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.

In case of contact, immediately flush skin with plenty of soap and water for at least 15 Skin

minutes. Get medical attention.

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

immediate medical attention.

If swallowed, call a physician immediately. Only induce vomiting at the instruction of Ingestion

a physician. Never give anything by mouth to an unconscious person.

Not Applicable **Notes to Physician**

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

Decomposition in fire may produce toxic gases. Use water spray to cool fire exposed

surfaces.

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.

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.

HANDLING AND STORAGE

Handling Precautions Avoid contact with eyes, skin, or clothing. Avoid breathing vapors. Do NOT consume

food, drink, or tobacco in contaminated areas. Wash hands after use. Launder

contaminated clothing before reuse.

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Storage Information Store away from oxidizers. Store in a cool well ventilated area. Keep container

closed when not in use. Product has a shelf life of 24 months.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls Use in a well ventilated area.

Respiratory Protection Organic vapor/acid gas respirator with a dust/mist filter.

Hand Protection Impervious rubber gloves.

Skin Protection Rubber apron.

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 light amber

 Odor:
 Mild amine

 pH:
 4- 9

 Specific Gravity @ 20 C (Water=1):
 1.0153

 Density @ 20 C (kg/l):
 1.0153

Bulk Density @ 20 C (kg/m³): Not Determined

Boiling Point/Range (C): 100

Freezing Point/Range (C):

Pour Point/Range (C):

Flash Point/Range (C):

Flash Point Method:

Not Determined

Not Determined

Not Determined

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 Not Determined Vapor Pressure @ 20 C (mmHg): Vapor Density (Air=1): Not Determined **Percent Volatiles:** Not Determined Not Determined **Evaporation Rate (Butyl Acetate=1):**

Solubility in Water (g/100ml): Soluble

Solubility in Solvents (g/100ml):

VOCs (g/l):

Not Determined

Not Determined

Viscosity, Dynamic @ 20 C (centipoise): 5-10

Viscosity, Kinematic @ 20 C (centistokes):

Partition Coefficient/n-Octanol/Water:

Molecular Weight (g/mole):

Decomposition Temperature (C):

Not Determined

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.

CLAYFIX-II MATERIAL Page 3 of 6 **Hazardous Decomposition**

Products

Chlorine. Hydrogen chloride. Oxides of nitrogen. Carbon monoxide and carbon

dioxide.

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 skin irritation.

Eye Contact May cause eye burns.

Ingestion May be fatal if swallowed.

Aggravated Medical Conditions Skin disorders. Eye ailments.

Chronic Effects/Carcinogenicity No data available to indicate product or components present at greater than 1% are

chronic health hazards.

Other Information None known.

Toxicity Tests

Oral Toxicity: LD50: 220 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 Slowly biodegradable

Bio-accumulation Not determined

Ecotoxicological Information

Acute Fish Toxicity: Not determined

Acute Crustaceans Toxicity: TLM96: 10.5 ppm (Mysidopsis bahia)

Acute Algae Toxicity: Not determined

Chemical Fate Information Not determined

Other Information Not applicable

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13. DISPOSAL CONSIDERATIONS

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

Contaminated Packaging Follow all applicable national or local regulations.

14. TRANSPORT INFORMATION

Land Transportation

ADR

UN2810, Toxic Liquid, Organic, N.O.S. (Contains Tetramethylammonium Chloride), 6.1, III

Air Transportation

ICAO/IATA

UN2810, Toxic Liquid, Organic, N.O.S., 6.1, III (Contains Tetramethylammonium Chloride)

Sea Transportation

IMDG

UN2810, Toxic Liquid, Organic, N.O.S. (Contains Tetramethylammonium Chloride), 6.1, III EmS F-A, S-A

Other Transportation Information

Labels: Toxic

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 T - Toxic.

Risk Phrases R21 Harmful in contact with skin.

R25 Toxic if swallowed.

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

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 This information is furnished without warranty, expressed or implied, as to accuracy

or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of

the user.

END OF MSDS