HALLIBURTON

MATERIAL SAFETY DATA SHEET

Product Trade Name: BARAKLEAN® FL

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, Non-Dangerous Goods according to

the criteria of ADG.

Manufacturer/Supplier Halliburton/Baroid 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

New Zealand: 06-7559274

Fire, Police & Ambulance - Emergency Telephone

Australia: 000

Papua New Guinea: 000 New Zealand: 111

Identification of Substances or Preparation

Product Trade Name: BARAKLEAN® FL

Synonyms: None
Chemical Family: Blend
UN Number: None
Dangerous Goods Class: None
Subsidiary Risk: None

Hazchem Code:

Poisons Schedule:

Application:

None Allocated

None Allocated

Surfactant

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
2-Ethyl hexanol	104-76-7	30 - 60%	TWA: 50 ppm TWA: 266 mg/m ³	TWA: 50 ppm TWA: 266 mg/m ³	TWA: 50 ppm

Non-Hazardous Substance to Total of 100%

HAZARDS IDENTIFICATION

Hazard Overview May cause eye, skin, and respiratory irritation.

Risk Phrases

R36/37/38 Irritating to eyes, respiratory system and skin.

HSNO Classification Not Determined

FIRST AID MEASURES

If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation Inhalation

develops or if breathing becomes difficult.

Wash with soap and water. Get medical attention if irritation persists. Remove Skin

contaminated clothing and launder before reuse.

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

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.

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

Use water spray to cool fire exposed surfaces. Decomposition in fire may produce **Special Exposure Hazards**

toxic gases.

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. Avoid breathing

mist. Wash hands after use. Launder contaminated clothing before reuse.

Storage Information Store away from oxidizers. Keep from heat, sparks, and open flames. Keep container

closed when not in use. Product has a shelf life of 36 months.

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8. 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: Organic vapor respirator.

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:

Color:

Cdor:

Husty

PH:

Specific Gravity @ 20 C (Water=1):

Density @ 20 C (kg/l):

Liquid

Light straw

Musty

6-8

0.9

0.9

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

Boiling Point/Range (C): 184
Freezing Point/Range (C): <-15

Pour Point/Range (C):

Not Determined

Flash Point/Range (C): 74
Flash Point Method: TCC
Autoignition Temperature (C): 288

Flammability Limits in Air - Lower (g/m³): Not Determined

Flammability Limits in Air - Lower (%): 0.88

Flammability Limits in Air - Upper (g/m³): Not Determined

Flammability Limits in Air - Upper (%): 9.7

Vapor Pressure @ 20 C (mmHg): Not Determined

Vapor Density (Air=1): 4.5

Percent Volatiles:

Evaporation Rate (Butyl Acetate=1):

Not Determined

Not Determined

Solubility in Water (g/100ml): Emulsifies, forms colloids

Solubility in Solvents (g/100ml):

VOCs (g/l):

Viscosity, Dynamic @ 20 C (centipoise):

Viscosity, Kinematic @ 20 C (centistokes):

Not Determined

Not Determined

Partition Coefficient/n-Octanol/Water: > 4

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 known.

Incompatibility (Materials to

Avoid)

Strong oxidizers.

BARAKLEAN® FL Page 3 of 6 **Hazardous Decomposition**

Products

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 Vapors given off by heated product may be harmful. May cause respiratory irritation.

Skin Contact May cause skin irritation.

Eye Contact May cause eye irritation.

Ingestion Irritation of the mouth, throat, and stomach.

Aggravated Medical Conditions Skin disorders.

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: Not determined

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 BOD(28 Day): 70% of COD

Slowly biodegradable

Bio-accumulation Not determined

Ecotoxicological Information

Acute Fish Toxicity: EC50: > 1890 mg/l (Corophium volutator)

Acute Crustaceans Toxicity: TLM48: 140 mg/l (Acartia tonsa)

Acute Algae Toxicity: EC50: 79 mg/l (Skeletonema costatum)

Chemical Fate Information Not determined

Other Information Not applicable

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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.

TRANSPORT INFORMATION

Land Transportation

ADR

Not restricted

Air Transportation

ICAO/IATA

Not restricted

Sea Transportation

IMDG

Not restricted

Other Transportation Information

Labels: None

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.

This product does not comply with NZIOC

All components listed on inventory or are exempt.

This product, and all its components, complies with EINECS

Classification Χi - Irritant.

Risk Phrases

R36/37/38 Irritating to eyes, respiratory system and skin.

Safety Phrases S26 In case of contact with eyes, rinse immediately with plenty of water and seek

medical advice.

S28 After contact with skin, wash immediately with plenty of water

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

OTHER INFORMATION

The following sections have been revised since the last issue of this SDS Not applicable

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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.

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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