HALLIBURTON

MATERIAL SAFETY DATA SHEET

Product Trade Name: AKTAFLO® E

Revision Date: 03-Feb-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/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: AKTAFLO® E

Synonyms: None
Chemical Family: Blend
UN Number: , UN1993

Dangerous Goods Class:3Subsidiary Risk:NoneHazchem Code:3[Y]

Poisons Schedule: None Allocated Application: 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 New Zealand ACGIH TLV-TWA

NOHSC WES

COMPOSITION/INFORMATION ON INGREDIENTS Isopropanol 67-63-0 1 - 5% TWA: 400 ppm STEL: 500 ppm TWA: 200 ppm STEL: 1230 mg/m³ TWA: 983 mg/m³ STEL: 400 ppm STEL: 500 ppm TWA: 400 ppm STEL: 1230 mg/m³ TWA: 983 mg/m³

Non-Hazardous Substance to Total of 100%

HAZARDS IDENTIFICATION

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

other central nervous system effects. May be harmful if swallowed. Combustible.

R10 Flammable. **Risk Phrases**

R22 Harmful if swallowed.

R53 May cause long-term adverse effects in the aquatic environment.

R36/38 Irritating to eyes and skin.

HSNO Classification 3.1C Flammable Liquids - Medium hazard 6.1E Acutely Toxic Substances 6.3B

Mildly irritating to the skin 6.4A Irritating to the eye 9.1B Ecotoxic in the aquatic

environment

FIRST AID MEASURES

If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably Inhalation

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.

In case of contact, or suspected contact, immediately flush eyes with plenty of water Eyes

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

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

Use water spray to cool fire exposed surfaces. Closed containers may explode in

fire. Decomposition in fire may produce 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. Remove ignition sources and work with non-sparking tools. 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. Store in a cool well ventilated area. Keep container

closed when not in use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering ControlsUse in a well ventilated area. Local exhaust ventilation should be used in areas

without good cross ventilation.

Respiratory Protection 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:LiquidColor:Light yellowOdor:Characteristic

pH: 8-10 Specific Gravity @ 20 C (Water=1): 1.05 Density @ 20 C (kg/l): 1.05

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

Boiling Point/Range (C): 100 Freezing Point/Range (C): -12

Pour Point/Range (C): Not Determined

Flash Point/Range (C): 48.5
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): 200-300

Viscosity, Kinematic @ 20 C (centistokes):

Partition Coefficient/n-Octanol/Water:

Molecular Weight (g/mole):

Decomposition Temperature (C):

Not Determined

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.

Hazardous Decomposition

Products

Oxides of nitrogen. Oxides of sulfur. 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. May cause central nervous system depression

including headache, dizziness, drowsiness, incoordination, slowed reaction time,

slurred speech, giddiness and unconsciousness.

Skin Contact May cause severe skin irritation. May be absorbed through the skin and contribute to

the symptoms listed under ingestion.

Eye Contact May cause severe eye irritation. May cause corneal injury.

Ingestion May cause abdominal pain, vomiting, nausea, and diarrhea. Irritation of the mouth,

throat, and stomach.

Aggravated Medical Conditions Skin disorders. Lung disorders.

Chronic Effects/Carcinogenicity Repeated overexposure may cause liver and kidney effects.

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 /

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 InformationNot determinedOther InformationNot applicable

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

UN1993, Flammable Liquid, N.O.S. (Contains Isopropanol), 3, III

Air Transportation

ICAO/IATA

UN1993,Flammable Liquid, N.O.S., 3, III (Contains Isopropanol)

Sea Transportation

IMDG

UN1993,Flammable Liquid, N.O.S.(Contains Isopropanol), 3, III, (48.5 C) EmS F-E, S-E

Other Transportation Information

Labels: Flammable Liquid

15. REGULATORY INFORMATION

Chemical Inventories

Australian AICS Inventory New Zealand Inventory of

All components listed on inventory or are exempt. This product does not comply with NZIOC

Chemicals

US TSCA Inventory All components listed on inventory or are exempt.

EINECS Inventory This product, and all its components, complies with EINECS

Classification Xn - Harmful.

Xi - Irritant.

N - Dangerous For The Environment.

Risk Phrases R10 Flammable.

R22 Harmful if swallowed.

R53 May cause long-term adverse effects in the aquatic environment.

R36/38 Irritating to eyes 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.

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.

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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