HALLIBURTON

MATERIAL SAFETY DATA SHEET

Product Trade Name: WS-36M

Revision Date: 03-Feb-2014

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: WS-36M
Synonyms: None
Chemical Family: Fatty-Acid
UN Number: None
Dangerous Goods Class: None
Subsidiary Risk: None

Hazchem Code:

Poisons Schedule:

Application:

None Allocated
None Allocated
Emulsifier

Prepared By Chemical Compliance

Telephone: 1-580-251-4335

e-mail: fdunexchem@halliburton.com

2. HAZARDS IDENTIFICATION

Statement of Hazardous Nature Hazardous according to the criteria of NOHSC, Non-Dangerous Goods according

to the criteria of ADG.

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

Classification Xi - Irritant.

Risk Phrases

R36/38 Irritating to eyes and skin.

Safety Phrases S2 Keep out of reach of children.

S24/25 Avoid contact with skin and eyes.

HSNO Classification 6.3A Irritating to the skin

6.4A Irritating to the eye

9.1C Harmful in the aquatic environment

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances	CAS Number	PERCENT (w/w)	Australia NOHSC	New Zealand	ACGIH TLV-TWA
				WES	
Ethoxylated sorbitol esters	Proprietary	60 - 100%	Not applicable	Not applicable	Not applicable
Ethoxylated fatty acids	Proprietary	1 - 5%	Not applicable	Not applicable	Not applicable
Alkyl aryl sulfonate	Proprietary	1 - 5%	Not applicable	Not applicable	Not applicable

Non-Hazardous Substance to Total of 100%

4. 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.

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

contaminated clothing and launder before reuse.

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

water for at least 15 minutes and get medical attention immediately after flushing.

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

of a physician. 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.

WS-36M Page 2 of 6 **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 ProtectionNot normally needed. But if significant exposures are possible then the following

respirator is recommended: Organic vapor respirator.

Hand Protection Nitrile gloves. Neoprene 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. Rubber boots

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid
Color: Clear amber
Odor: Mild sweet

pH: 5.1 (5%(75%IPA/25% H20))

Specific Gravity @ 20 C (Water=1): 1.011 **Density @ 20 C (kg/l):** 1.028

Bulk Density @ 20 C (kg/M3):

Boiling Point/Range (C):

Freezing Point/Range (C):

Pour Point/Range (C):

Flash Point/Range (C):

Not Determined
Not Determined
Not Determined
Not Determined
Not Determined
> 93 Min: > 93

Flash Point Method: TCC

Autoignition Temperature (C):

Flammability Limits in Air - Lower (g/m³):

Flammability Limits in Air - Lower (%):

Flammability Limits in Air - Upper (g/m³):

Flammability Limits in Air - Upper (%):

Not Determined

Not Determined

Not Determined

Vapor Pressure @ 20 C (mmHg): .093 Vapor Density (Air=1): > 1

Percent Volatiles:

Evaporation Rate (Butyl Acetate=1):

Solubility in Water (g/100ml):

Solubility in Solvents (g/100ml):

Not Determined
Disperses
Not Determined

WS-36M Page 3 of 6 VOCs (g/l):

Viscosity, Dynamic @ 20 C (centipoise):

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

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

Acute Toxicity

Product InformationUnder certain conditions of use, some of the product ingredients may cause the following:

Inhalation May cause respiratory irritation.

Eye Contact May cause eye irritation.

Skin Contact May cause skin defatting with prolonged exposure. May cause skin irritation.

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

and diarrhea.

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

health hazards.

Toxicology data for the components

Toxicology data for the components								
Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation				
Ethoxylated sorbitol esters	Proprietary	No data available	No data available	No data available				
Ethoxylated fatty acids	Proprietary	> 6400 mg/kg (Rat)	No data available	No data available				
Alkyl aryl sulfonate	Proprietary	No data available	No data available	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)
Ethoxylated sorbitol esters	Proprietary	No information available	No information available	No information available	No information available
Ethoxylated fatty acids	Proprietary	EC50(72h): > 44 mg/L	LC50(95h): 7.8 mg/L (Brachydanio rerio)	EC20(180m): >1000 mg/L	EC50(48h): 16 mg/L (Daphnia magna)
Alkyl aryl sulfonate	Proprietary	No information available	No information available	No information available	No information available

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.

Incineration recommended in approved incinerator according to 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 does not comply with EINECS

Classification Xi - Irritant.

Risk Phrases

R36/38 Irritating to eyes and skin.

Safety Phrases S2 Keep out of reach of children.

S24/25 Avoid contact with skin and eyes.

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