

## MATERIAL SAFETY DATA SHEET

**Product Trade Name:** LOSURF-300 NONIONIC SURFACTANT

**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  
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:** LOSURF-300 NONIONIC SURFACTANT  
**Synonyms:** None  
**Chemical Family:** Blend  
**UN Number:** , UN1993  
**Dangerous Goods Class:** 3  
**Subsidiary Risk:** None  
**Hazchem Code:** 3[Y]E  
**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<br>NOHSC | New Zealand<br>WES | ACGIH TLV-TWA  |
|------------------------|------------|----------|--------------------|--------------------|----------------|
| Light aromatic solvent | 64742-95-6 | 10 - 30% | Not applicable     | Not applicable     | Not applicable |

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

|                         |             |          |                                                                                             |                                                                                             |                               |
|-------------------------|-------------|----------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-------------------------------|
| Naphthalene             | 91-20-3     | 1 - 5%   | TWA: 10 ppm<br>TWA: 52 mg/m <sup>3</sup><br>STEL: 15 ppm<br>STEL: 79 mg/m <sup>3</sup>      | STEL: 15 ppm<br>STEL: 79 mg/m <sup>3</sup><br>TWA: 10 ppm<br>TWA: 52 mg/m <sup>3</sup>      | TWA: 10 ppm<br>STEL: 15 ppm   |
| Ethoxylated nonylphenol | Proprietary | 5 - 10%  | Not applicable                                                                              | Not applicable                                                                              | Not applicable                |
| Isopropanol             | 67-63-0     | 30 - 60% | TWA: 400 ppm<br>TWA: 983 mg/m <sup>3</sup><br>STEL: 500 ppm<br>STEL: 1230 mg/m <sup>3</sup> | STEL: 500 ppm<br>STEL: 1230 mg/m <sup>3</sup><br>TWA: 400 ppm<br>TWA: 983 mg/m <sup>3</sup> | TWA: 200 ppm<br>STEL: 400 ppm |

**Non-Hazardous Substance to Total of 100%**

## 3. 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. Flammable. Potential carcinogen.

### Risk Phrases

R10 Flammable.  
R40 Limited evidence of a carcinogenic effect.  
R23/24/25 Toxic by inhalation, by contact with skin, and if swallowed.  
R39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin, and if swallowed.

### HSNO Classification

Not Determined

## 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

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.

### 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

Get medical attention! If vomiting occurs, keep head lower than hips to prevent aspiration.

### 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

May be ignited by heat, sparks or flames. Use water spray to cool fire exposed surfaces. Closed containers may explode in fire. 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. Wear self-contained breathing apparatus in enclosed areas.

**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. Wash hands after use. Launder contaminated clothing before reuse. Ground and bond containers when transferring from one container to another.

**Storage Information** Store away from oxidizers. Keep from heat, sparks, and open flames. Keep container closed when not in use.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Controls** Use in a well ventilated area. Local exhaust ventilation should be used in areas without good cross ventilation.

**Respiratory Protection** Organic vapor respirator.  
In high concentrations, supplied air respirator or a self-contained breathing apparatus.

**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

|                                                              |                |
|--------------------------------------------------------------|----------------|
| <b>Physical State:</b>                                       | Liquid         |
| <b>Color:</b>                                                | Amber          |
| <b>Odor:</b>                                                 | Alcohol        |
| <b>pH:</b>                                                   | 7.5            |
| <b>Specific Gravity @ 20 C (Water=1):</b>                    | 0.91           |
| <b>Density @ 20 C (kg/l):</b>                                | 0.91           |
| <b>Bulk Density @ 20 C (kg/m<sup>3</sup>):</b>               | Not Determined |
| <b>Boiling Point/Range (C):</b>                              | Not Determined |
| <b>Freezing Point/Range (C):</b>                             | -2             |
| <b>Pour Point/Range (C):</b>                                 | Not Determined |
| <b>Flash Point/Range (C):</b>                                | 18             |
| <b>Flash Point Method:</b>                                   | PMCC           |
| <b>Autoignition Temperature (C):</b>                         | Not Determined |
| <b>Flammability Limits in Air - Lower (g/m<sup>3</sup>):</b> | Not Determined |
| <b>Flammability Limits in Air - Lower (%):</b>               | Not Determined |
| <b>Flammability Limits in Air - Upper (g/m<sup>3</sup>):</b> | Not Determined |
| <b>Flammability Limits in Air - Upper (%):</b>               | Not Determined |
| <b>Vapor Pressure @ 20 C (mmHg):</b>                         | Not Determined |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|                                            |                |
|--------------------------------------------|----------------|
| Vapor Density (Air=1):                     | Not Determined |
| Percent Volatiles:                         | 60-65          |
| Evaporation Rate (Butyl Acetate=1):        | Not Determined |
| Solubility in Water (g/100ml):             | Disperses      |
| Solubility in Solvents (g/100ml):          | Not Determined |
| VOCs (g/l):                                | Not Determined |
| Viscosity, Dynamic @ 20 C (centipoise):    | Not Determined |
| 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 |

## 10. STABILITY AND REACTIVITY

|                                      |                                        |
|--------------------------------------|----------------------------------------|
| Stability Data:                      | Stable                                 |
| Hazardous Polymerization:            | Will Not Occur                         |
| Conditions to Avoid                  | Keep away from heat, sparks and flame. |
| 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.                                                                                                                                                                                                                                                                                                                                                                        |
| <u>Symptoms related to exposure</u> |                                                                                                                                                                                                                                                                                                                                                                                                         |
| 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 skin defatting with prolonged exposure. Can dry skin.                                                                                                                                                                                                                                                                                                                                         |
| Eye Contact                         | May cause eye irritation.                                                                                                                                                                                                                                                                                                                                                                               |
| Ingestion                           | Irritation of the mouth, throat, and stomach. May cause abdominal pain, vomiting, nausea, and diarrhea. May cause headache, dizziness, nausea, vomiting, gastrointestinal irritation and central nervous system depression.                                                                                                                                                                             |
| Aggravated Medical Conditions       | Skin disorders. Eye ailments.                                                                                                                                                                                                                                                                                                                                                                           |
| Chronic Effects/Carcinogenicity     | Repeated overexposure may cause liver and kidney effects. Contains petroleum distillates which have been shown to cause skin cancer in laboratory animals. The International Agency for Research on Cancer (IARC) has evaluated naphthalene and determined it to be a possible carcinogen to humans (Group 2B, based on sufficient evidence in experimental animals and inadequate evidence in humans). |
| Other Information                   | None known.                                                                                                                                                                                                                                                                                                                                                                                             |
| Toxicity Tests                      |                                                                                                                                                                                                                                                                                                                                                                                                         |
| Oral Toxicity:                      | Not determined                                                                                                                                                                                                                                                                                                                                                                                          |

|                                                   |                |
|---------------------------------------------------|----------------|
| <b>Dermal Toxicity:</b>                           | Not determined |
| <b>Inhalation Toxicity:</b>                       | Not determined |
| <b>Primary Irritation Effect:</b>                 | Not determined |
| <b>Carcinogenicity</b>                            | Not determined |
| <b>Genotoxicity:</b>                              | Not determined |
| <b>Reproductive /<br/>Developmental Toxicity:</b> | Not determined |

## 12. ECOLOGICAL INFORMATION

|                                  |                |
|----------------------------------|----------------|
| <b>Mobility (Water/Soil/Air)</b> | Not determined |
| <b>Persistence/Degradability</b> | Not determined |
| <b>Bio-accumulation</b>          | Not determined |

### Ecotoxicological Information

|                                    |                                   |
|------------------------------------|-----------------------------------|
| <b>Acute Fish Toxicity:</b>        | Not determined                    |
| <b>Acute Crustaceans Toxicity:</b> | TLM96: 3300 ppm (Crangon crangon) |
| <b>Acute Algae Toxicity:</b>       | Not determined                    |

|                                  |                |
|----------------------------------|----------------|
| <b>Chemical Fate Information</b> | Not determined |
| <b>Other Information</b>         | Not applicable |

## 13. DISPOSAL CONSIDERATIONS

|                               |                                                                                   |
|-------------------------------|-----------------------------------------------------------------------------------|
| <b>Disposal Method</b>        | Disposal should be made in accordance with federal, state, and local regulations. |
| <b>Contaminated Packaging</b> | Follow all applicable national or local regulations.                              |

## 14. TRANSPORT INFORMATION

### Land Transportation

#### ADR

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

### Air Transportation

#### ICAO/IATA

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

### Sea Transportation

#### IMDG

UN1993, Flammable Liquid, N.O.S. (Contains Isopropanol), 3, II, (17.2 C)  
EmS F-E, S-E

## Other Transportation Information

Labels: Flammable Liquid

## 15. REGULATORY INFORMATION

### Chemical Inventories

**Australian AICS Inventory** All components listed on inventory or are exempt.  
**New Zealand Inventory of Chemicals** This product does not comply with NZIOC  
**US TSCA Inventory** All components listed on inventory or are exempt.  
**EINECS Inventory** This product does not comply with EINECS

**Classification** T - Toxic.

**Risk Phrases** R10 Flammable.  
R40 Limited evidence of a carcinogenic effect.  
R23/24/25 Toxic by inhalation, by contact with skin, and if swallowed.  
R39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin, and if swallowed.

**Safety Phrases** S2 Keep out of reach of children.  
S7 Keep container tightly closed.  
S16 Keep away from sources of ignition - No Smoking.  
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S45 In case of accident or if you feel unwell, seek medical advice immediately.  
S53 Avoid exposure - obtain special instructions before use.  
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.

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**\*\*\*END OF MSDS\*\*\***