

## MATERIAL SAFETY DATA SHEET

**Product Trade Name:** DCA-32002

**Revision Date:** 05-Mar-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:** DCA-32002  
**Synonyms:** None  
**Chemical Family:** Ethoxylated and propoxylated alcohols  
**UN Number:** None  
**Dangerous Goods Class:** None  
**Subsidiary Risk:** None  
**Hazchem Code:** None Allocated  
**Poisons Schedule:** None Allocated  
**Application:** Surfactant

**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 irritation

**Classification** Xi - Irritant.  
N - Dangerous For The Environment.

**Risk Phrases** R41 Risk of serious damage to eyes.  
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Safety Phrases** S25 Avoid contact with eyes.  
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**HSNO Classification** 8.3A Corrosive to ocular tissue  
9.1A Very ecotoxic in the aquatic environment

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Substances                                  | CAS Number | PERCENT (w/w) | Australia      | NOHSC          | New Zealand    | ACGIH TLV-TWA  |
|---|------------|---------------|----------------|----------------|----------------|----------------|
|   |            |               | WES            |                |                |                |
| Alcohols, C6-C12, ethoxylated propoxylated  | 68937-66-6 | 60 - 100%     | Not applicable | Not applicable | Not applicable | Not applicable |
| Alcohols, C10-C16, ethoxylated propoxylated | 69227-22-1 | 10 - 30%      | Not applicable | Not applicable | Not applicable | Not applicable |

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

### 4. FIRST AID MEASURES

**Inhalation** Under normal conditions, first aid procedures are not required.

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

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

**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

### 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

|   |  |
|---|--|
| <b>Personal Precautionary Measures</b>      | Use appropriate protective equipment.  |
| <b>Environmental Precautionary Measures</b> | Prevent from entering sewers, waterways, or low areas.   |
| <b>Procedure for Cleaning / Absorption</b>  | Isolate spill and stop leak where safe. Contain spill with sand or other inert materials. Scoop up and remove. |

## 7. HANDLING AND STORAGE

|                             |   |
|-----------------------------|---|
| <b>Handling Precautions</b> | Avoid contact with eyes, skin, or clothing. Wash hands after use. Slippery when wet. Launder contaminated clothing before reuse.                  |
| <b>Storage Information</b>  | Store away from oxidizers. Keep container closed when not in use. Keep from heat, sparks, and open flames. Product has a shelf life of 24 months. |

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

|                               |   |
|-------------------------------|---|
| <b>Engineering Controls</b>   | None known.   |
| <b>Respiratory Protection</b> | Not normally necessary.                                     |
| <b>Hand Protection</b>        | Impervious rubber gloves. Polyvinylchloride gloves.         |
| <b>Skin Protection</b>        | Normal work coveralls.                                      |
| <b>Eye Protection</b>         | Wear safety glasses or goggles to protect against exposure. |
| <b>Other Precautions</b>      | None known.   |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|  |                       |
|--|-----------------------|
| <b>Physical State:</b>                                       | Liquid                |
| <b>Color:</b>  | Yellow                |
| <b>Odor:</b>   | Mild                  |
| <b>pH:</b>   | 6.5 (1%)              |
| <b>Specific Gravity @ 20 C (Water=1):</b>                    | 0.98                  |
| <b>Density @ 20 C (kg/l):</b>                                | 0.95                  |
| <b>Bulk Density @ 20 C (kg/M3):</b>                          | Not Determined        |
| <b>Boiling Point/Range (C):</b>                              | Not Determined        |
| <b>Freezing Point/Range (C):</b>                             | -3                    |
| <b>Pour Point/Range (C):</b>                                 | Not Determined        |
| <b>Flash Point/Range (C):</b>                                | 240 <b>Min:</b> > 100 |
| <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        |
| <b>Vapor Density (Air=1):</b>                                | > 10                  |
| <b>Percent Volatiles:</b>                                    | 0                     |
| <b>Evaporation Rate (Butyl Acetate=1):</b>                   | Not Determined        |
| <b>Solubility in Water (g/100ml):</b>                        | Soluble               |
| <b>Solubility in Solvents (g/100ml):</b>                     | Not Determined        |
| <b>VOCs (g/l):</b>   | Not Determined        |

|  |                |
|--|----------------|
| Viscosity, Dynamic @ 20 C (centipoise):    | Not Determined |
| Viscosity, Kinematic @ 20 C (centistokes): | 30.07          |
| 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                  | None anticipated                                |
| Incompatibility (Materials to Avoid) | Strong oxidizers. Strong acids. Strong alkalis. |
| Hazardous Decomposition Products     | Carbon monoxide and carbon dioxide.             |
| Additional Guidelines                | Not Applicable                                  |

## 11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure Eye or skin contact, inhalation.

### Symptoms related to exposure

#### Acute Toxicity

|              |   |
|--------------|---|
| Inhalation   | May cause mild respiratory irritation.        |
| Eye Contact  | Causes severe eye irritation                  |
| Skin Contact | May cause mild skin irritation.               |
| Ingestion    | Irritation of the mouth, throat, and stomach. |

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

| Substances                                  | CAS Number | LD50 Oral                              | LD50 Dermal                            | LC50 Inhalation                          |
|---|------------|--|--|--|
| Alcohols, C6-C12, ethoxylated propoxylated  | 68937-66-6 | > 5000 mg/kg (Rat) (similar substance) | > 2000 mg/kg (Rat) (similar substance) | > 1.6 mg/L air (Rat) (similar substance) |
| Alcohols, C10-C16, ethoxylated propoxylated | 69227-22-1 | > 5000 mg/kg (Rat) (similar substance) | > 2000 mg/kg (Rat) (similar substance) | > 1.6 mg/L air (Rat) (similar substance) |

## 12. ECOLOGICAL INFORMATION

### Ecotoxicological Information

#### Ecotoxicity Product

|                             |  |
|-----------------------------|--|
| Acute Fish Toxicity:        | Not determined                                       |
| Acute Crustaceans Toxicity: | EC50: 1.45-1.79 mg/l (Daphnia magna)                 |
| Acute Algae Toxicity:       | EC50(72hr): 1.45-1.75 mg/l (Scenedesmus subspicatus) |

#### Ecotoxicity Substance

| Substances | CAS Number | Toxicity to Algae | Toxicity to Fish | Toxicity to Microorganisms | Toxicity to Invertebrates |
|------------|------------|-------------------|------------------|----------------------------|---------------------------|
|            |            |                   |                  |                            |                           |

|   |            |   |  |  |  |
|---|------------|---|--|--|--|
| Alcohols, C6-C12, ethoxylated propoxylated  | 68937-66-6 | EC50(72h): 0.75 mg/L (Pseudokirchnerella subcapitata) (similar substance) | LC50(96h): 0.59 mg/L (Pleuronectes platessa) (similar substance) | EC50(16.9h): > 10 g/L (growth inhibition) (Pseudomonas putida) (similar substance) | EC50(48h): 0.14 mg/L (Daphnia magna) (similar substance) |
| Alcohols, C10-C16, ethoxylated propoxylated | 69227-22-1 | EC50(72h): 0.75 mg/L (Pseudokirchnerella subcapitata) (similar substance) | LC50(96h): 0.59 mg/L (Pleuronectes platessa) (similar substance) | EC50(16.9h): > 10 g/L (growth inhibition) (Pseudomonas putida) (similar substance) | EC50(48h): 0.14 mg/L (Daphnia magna) (similar substance) |

### 12.2 Persistence and degradability

Readily biodegradable

| Substances                                  | Persistence and Degradability                          |
|---|--|
| Alcohols, C6-C12, ethoxylated propoxylated  | Readily biodegradable (72% @ 28d) (similar substances) |
| Alcohols, C10-C16, ethoxylated propoxylated | Readily biodegradable (72% @ 28d) (similar substances) |

### 12.3 Bioaccumulative potential

| Substances                                  | Log Pow                  |
|---|--------------------------|
| Alcohols, C6-C12, ethoxylated propoxylated  | 5.06 (similar substance) |
| Alcohols, C10-C16, ethoxylated propoxylated | 5.06 (similar substance) |

### 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.

**Contaminated Packaging** Follow all applicable national or local regulations.

## 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

|   |  |
|---|--|
| <b>Australian AICS Inventory</b>          | All components listed on inventory or are exempt.  |
| <b>New Zealand Inventory of Chemicals</b> | All components listed on inventory or are exempt.  |
| <b>US TSCA Inventory</b>                  | All components listed on inventory or are exempt.  |
| <b>EINECS Inventory</b>                   | This product, and all its components, complies with EINECS   |
| <b>Classification</b>                     | Xi - Irritant.<br><br>N - Dangerous For The Environment.   |
| <b>Risk Phrases</b>                       | R41 Risk of serious damage to eyes.<br>R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| <b>Safety Phrases</b>                     | S25 Avoid contact with eyes.<br>S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.              |

## 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

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