

## MATERIAL SAFETY DATA SHEET

**Product Trade Name:** CFR-3

**Revision Date:** 26-Sep-2013

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Statement of Hazardous Nature** Non-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:** CFR-3  
**Synonyms:** None  
**Chemical Family:** Organosulfur  
**UN Number:** None  
**Dangerous Goods Class:** None  
**Subsidiary Risk:** None  
**Hazchem Code:** None Allocated  
**Poisons Schedule:** None Allocated  
**Application:** Cement Friction Reducer

**Prepared By** Chemical Compliance  
Telephone: 1-580-251-4335  
e-mail: fdunexchem@halliburton.com

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Substances	CAS Number	PERCENT (w/w)	Australia NOHSC	New Zealand WES	ACGIH TLV-TWA
Contains no hazardous substances	Mixture	60 - 100%	Not applicable	Not applicable	Not applicable

Non-Hazardous Substance to Total of 100%

### 3. HAZARDS IDENTIFICATION

<b>Hazard Overview</b>	May cause mild eye, skin, and respiratory irritation. Airborne dust may be explosive.
<b>Risk Phrases</b>	None
<b>HSNO Classification</b>	9.1D Slightly harmful in the aquatic environment

### 4. FIRST AID MEASURES

<b>Inhalation</b>	If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.
<b>Skin</b>	Wash with soap and water. Get medical attention if irritation persists.
<b>Eyes</b>	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.
<b>Ingestion</b>	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.
<b>Notes to Physician</b>	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.

<b>Special Exposure Hazards</b>	Decomposition in fire may produce toxic gases. Organic dust in the presence of an ignition source can be explosive in high concentrations. Good housekeeping practices are required to minimize this potential.
<b>Special Protective Equipment for Fire-Fighters</b>	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. Avoid creating and breathing dust.
<b>Environmental Precautionary Measures</b>	None known.
<b>Procedure for Cleaning / Absorption</b>	Scoop up and remove.

### 7. HANDLING AND STORAGE

<b>Handling Precautions</b>	Avoid creating or inhaling dust. Slippery when wet.
<b>Storage Information</b>	Store away from oxidizers. Store in a cool, dry location.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<b>Engineering Controls</b>	Use in a well ventilated area.
<b>Respiratory Protection</b>	Not normally needed. But if significant exposures are possible then the following respirator is recommended: Dust/mist respirator. (N95, P2/P3)
<b>Hand Protection</b>	Normal work 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>	Solid
<b>Color:</b>	Red brown
<b>Odor:</b>	Musty
<b>pH:</b>	7-8
<b>Specific Gravity @ 20 C (Water=1):</b>	1.17
<b>Density @ 20 C (kg/l):</b>	Not Determined
<b>Bulk Density @ 20 C (kg/M3):</b>	600
<b>Boiling Point/Range (C):</b>	Not Determined
<b>Freezing Point/Range (C):</b>	Not Determined
<b>Pour Point/Range (C):</b>	Not Determined
<b>Flash Point/Range (C):</b>	Not Determined
<b>Flash Point Method:</b>	Not Determined
<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>	Not Determined
<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
<b>Viscosity, Dynamic @ 20 C (centipoise):</b>	Not Determined
<b>Viscosity, Kinematic @ 20 C (centistokes):</b>	Not Determined
<b>Partition Coefficient/n-Octanol/Water:</b>	Not Determined
<b>Molecular Weight (g/mole):</b>	> 600
<b>Decomposition Temperature (C):</b>	Not Determined

## 10. STABILITY AND REACTIVITY

<b>Stability Data:</b>	Stable
<b>Hazardous Polymerization:</b>	Will Not Occur
<b>Conditions to Avoid</b>	None anticipated

<b>Incompatibility (Materials to Avoid)</b>	Strong oxidizers.
<b>Hazardous Decomposition Products</b>	Oxides of sulfur. Carbon monoxide and carbon dioxide.
<b>Additional Guidelines</b>	Not Applicable

## 11. TOXICOLOGICAL INFORMATION

**Principle Route of Exposure** Eye or skin contact, inhalation.

### Symptoms related to exposure

#### **Acute Toxicity**

<b>Inhalation</b>	May cause mild respiratory irritation.
<b>Eye Contact</b>	May cause mild eye irritation.
<b>Skin Contact</b>	Prolonged or repeated contact may cause slight skin irritation.
<b>Ingestion</b>	None known

**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
Contains no hazardous substances	Mixture	No data available	No data available	No data available

## 12. ECOLOGICAL INFORMATION

### **Ecotoxicological Information**

#### Ecotoxicity Product

<b>Acute Fish Toxicity:</b>	TLM48: 7478 mg/l (Orange-Red Killfish)
<b>Acute Crustaceans Toxicity:</b>	TLM96: > 3300 ppm (Crangon crangon)
<b>Acute Algae Toxicity:</b>	Not determined

#### Ecotoxicity Substance

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Contains no hazardous substances	Mixture	No information available	No information available	No information available	No information available

#### 12.2 Persistence and degradability

Not readily biodegradable

#### 12.3 Bioaccumulative potential

Does not bioaccumulate

#### 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

<b>Disposal Method</b>	Bury in a licensed landfill according to federal, state, and local regulations. Substance should NOT be deposited into a sewage facility.
<b>Contaminated Packaging</b>	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>	Not Classified
<b>Risk Phrases</b>	None

**Safety Phrases** None

## 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\*\*\***