

## CF DESCO® II

## SECTION 1. IDENTIFICATION

<b>Product Identifier</b>	CF DESCO® II
<b>Product Family</b>	Deflocculant
<b>Recommended Use</b>	Drilling Fluid Additive.
<b>Supplier</b>	Bri-Chem Supply Ltd., Bay 4, 5510 - 3rd Street SE, Calgary, Alberta, T2H 1J9, Bri-Chem Supply, 403-252-5904, www.brichemsupply.com
<b>Emergency Phone No.</b>	ChemTrec, (800) 424-9300, 24/7

## SECTION 2. HAZARDS IDENTIFICATION

## GHS Classification

Carcinogenicity - Category 1B; Aquatic hazard (Chronic) - Category 3

## GHS Label Elements



Signal Word:

WARNING!

This product contains a small amount of quartz (CAS# 14808-60-7) that may cause delayed respiratory disease if inhaled over a long period of time.

## Other Hazards

Environmental Harmful to aquatic organism: may cause long-term adverse effects in the aquatic environment.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	%	Other Identifiers
Methyl ester of sulfonated tannin	Proprietary	45-55	
Proprietary	Proprietary	35	
Ferrous sulfate	17375-41-6	<10	
Silica, quartz	14808-60-7	<1	

## SECTION 4. FIRST-AID MEASURES

## First-aid Measures

## Inhalation

Move to fresh air. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by Poison Centre or doctor. If breathing has stopped, trained personnel should begin rescue breathing. Call a Poison Centre or doctor if you feel unwell or are concerned.

## Skin Contact

Immediately wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 15-20 minutes. Discard contaminated clothing and shoes or thoroughly launder before re-use. Call a Poison Centre or doctor if you feel unwell or are concerned.

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### **Eye Contact**

Immediately flush the contaminated eye(s) with lukewarm, gently flowing water while holding the eyelid(s) open. Remove contact lenses, if worn, after initial flushing and continue flushing for at least 15 minutes. If eye irritation persists, get medical advice/attention.

### **Ingestion**

DO NOT INDUCE VOMITING. Give the person a glass of water or milk. Never give anything by mouth to an unconscious or convulsing victim. Immediately call a Poison Centre or doctor.

### **Most Important Symptoms and Effects, Acute and Delayed**

If on skin:

May cause mild irritation.

If in eyes:

May cause mild irritation.

### **Immediate Medical Attention and Special Treatment**

#### **Target Organs**

May cause damage to the lungs, liver, gastrointestinal system and blood/blood-forming organs.

## **SECTION 5. FIRE-FIGHTING MEASURES**

### **Suitable Extinguishing Media**

Carbon dioxide, dry chemical powder, appropriate foam, water spray or fog.

### **Specific Hazards Arising from the Chemical**

Non flammable or combustible. This material will burn although it is not easily ignited.

Combustion may form carbon oxides, iron oxides, sulfur oxides.

### **Special Protective Equipment and Precautions for Fire-fighters**

Evacuate area of all unnecessary personnel. Cool surrounding equipment, fire-exposed containers and structures with water. Container areas exposed to direct flame contact should be cooled with large quantities of water (2m<sup>3</sup> of water per minute flame impingement exposure) to prevent weakening of container structure.

A full-body encapsulating chemical protective suit with positive pressure SCBA will be necessary.

## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

### **Personal Precautions, Protective Equipment, and Emergency Procedures**

Use the personal protective equipment recommended in Section 8 of this safety data sheet.

### **Environmental Precautions**

May cause long-term adverse effects in the aquatic environment. Do not allow into any sewer, on the ground or into any waterway.

### **Methods and Materials for Containment and Cleaning Up**

Reduce airborne dust and prevent scattering by moistening with water. Avoid generating dust. Shovel, sweep up or use industrial vacuum to pick up. Collect contaminated material in an approved container for disposal. Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding, may be necessary but may not be sufficient; use appropriate mitigating procedurea.

## **SECTION 7. HANDLING AND STORAGE**

### **Precautions for Safe Handling**

Only use where there is adequate ventilation. Avoid generating dust and avoid contact with dust (airborne dust concentrations above 20 mg/L may create a dust explosion hazard). Keep containers tightly closed when not in use or empty. Electrically bond and ground equipment. Ground clips must contact bare metal. Wear personal protective equipment to avoid direct contact with this chemical.

It is good practice to: avoid breathing product; avoid skin and eye contact and wash hands after handling.

### **Conditions for Safe Storage**

Treat as a solid that can burn. Store away from oxidizing materials in a cool, dry place with adequate ventilation. Bond and ground transfer equipment. DO NOT USE OR STORE near heat, sparks or open flames. USE AND STORE ONLY IN WELL-VENTILATED AREA. Keep container closed when not in use. Empty ontainers contain residual hazardous

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materials and must be handled with the same care and attention as if full.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ACGIH® = American Conference of Governmental Industrial Hygienists. (Silica, quartz) tWA = Time-Weighted Average. 0.025 mg/m<sup>3</sup>

ACGIH® = American Conference of Governmental Industrial Hygienists. (Ferrous sulfate) tWA = Time-Weighted Average. 1 mg/m<sup>3</sup>

ACGIH® = American Conference of Governmental Industrial Hygienists. (Methyl ester of sulfonated tannin) tWA = Time-Weighted Average. Not Established.

### Appropriate Engineering Controls

If heated material generates vapour or fumes, use process enclosures, local exhaust or other engineering controls to control exposure.

### Individual Protection Measures

#### Eye/Face Protection

Wear chemical safety goggles and face shield when contact is possible.

#### Skin Protection

Wear impervious protective clothing and boots as required to prevent contact. Neoprene gloves are recommended.

#### Respiratory Protection

Be sure to use a NIOSH-approved respirator when ventilation is inadequate.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### Basic Physical and Chemical Properties

<b>Appearance</b>	Red - brown powder. Particle Size: Not applicable
<b>Odour</b>	Odourless
<b>Odour Threshold</b>	Not applicable
<b>pH</b>	~ 8.5
<b>Melting Point/Freezing Point</b>	Not available (melting); Not available (freezing)
<b>Initial Boiling Point/Range</b>	Not available
<b>Flash Point</b>	Not applicable
<b>Evaporation Rate</b>	Not applicable
<b>Upper/Lower Flammability or Explosive Limit</b>	Not available (upper); Not available (lower)
<b>Vapour Pressure</b>	Not applicable
<b>Vapour Density (air = 1)</b>	Not applicable
<b>Relative Density (water = 1)</b>	1.5 - 1.7
<b>Solubility</b>	Moderately soluble in water; Not applicable (in other liquids)
<b>Partition Coefficient, n-Octanol/Water (Log Kow)</b>	Not applicable
<b>Auto-ignition Temperature</b>	Not applicable
<b>Decomposition Temperature</b>	Not available
<b>Viscosity</b>	Not applicable (kinematic)
<b>Other Information</b>	
<b>Physical State</b>	Solid
<b>Molecular Formula</b>	Mixture
<b>Molecular Weight</b>	Not applicable
<b>Bulk Density</b>	Not applicable
<b>Surface Tension</b>	Not applicable

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<b>Critical Temperature</b>	Not applicable
<b>Electrical Conductivity</b>	Not applicable
<b>Vapour Pressure at 50 deg C</b>	Not applicable
<b>Saturated Vapour Concentration</b>	Not applicable

## SECTION 10. STABILITY AND REACTIVITY

### Chemical Stability

This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

### Possibility of Hazardous Reactions

Hazardous polymerization will not occur.

### Conditions to Avoid

No data available.

### Incompatible Materials

May react with oxygen and strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

### Hazardous Decomposition Products

Carbon and sulfur.

## SECTION 11. TOXICOLOGICAL INFORMATION

The toxicological properties of this product have not been tested or have not been tested completely and its handling or use may be hazardous. EXERCISE DUE CARE. Long term exposure to high dust concentrations may cause non-debilitating lung changes.

This material contains: IRON DUSTS and CRYSTALLINE SILICA.

### Skin Corrosion/Irritation

May cause mild irritation. Not expected to be harmful to internal organs if absorbed through the skin.

### Serious Eye Damage/Irritation

May cause mild irritation. Symptoms may include pain, tearing, reddening, swelling and impaired vision. Material is dusty and may scratch the surface of the eye.

### STOT (Specific Target Organ Toxicity) - Single Exposure

#### Inhalation

The dust from this product may cause respiratory irritation. Symptoms may include coughing and difficulty in breathing.

#### Ingestion

Not expected to be harmful if swallowed.

### STOT (Specific Target Organ Toxicity) - Repeated Exposure

May cause damage to organs through prolonged or repeated exposure.

### Carcinogenicity

This product contains crystalline quartz silica. Prolonged or repeated exposure to crystalline quartz silica contained in this material can cause cancer. Risk depends on duration and level of exposure.

Crystalline Quartz Silica:

IARC = Group 1 Human Carcinogen based on sufficient evidence in humans.

NTP = Group K Human Carcinogen based on sufficient evidence in humans.

ACGIH = Category A2 Suspected Human Carcinogen based on limited evidence in humans and sufficient evidence on animals with relevance to humans.

## SECTION 12. ECOLOGICAL INFORMATION

Environmental fate of this material is not available.

### Toxicity

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This material is expected to be harmful to aquatic organisms.

Ferrous sulfate:

LC50 (48 hr mysid shrimp {Mysidopsis bahia}) = 56 ppm

Methyl ester of sulfonated tannin:

LC50 (96 hr Flatfish, Flounder {Scophthalmus maximus}) = >1800 mg/L

EC50 (168 hr Freshwater Plant {Lemna minor}) = > 1000 mg/L

NOEC (168 hr Freshwater Plant { Lemna minor}) = 1000 mg/L

EC50 (48 hr Marine Copepod {Acartia tonsa}) = 73.2 mg/L

## SECTION 13. DISPOSAL CONSIDERATIONS

### Disposal Methods

Use material for its intended purpose or recycle if possible. If it is to be discarded, this material may meet the criteria of a hazardous waste as defined by provincial or local regulations. Contact local environmental authorities for approved disposal or recycling methods in your jurisdiction.

## SECTION 14. TRANSPORT INFORMATION

Not regulated under US DOT Regulations.

### Special Precautions for User

Please note: The shipping descriptions shown here are for bulk shipments only and may not apply to shipments in non-bulk packages. Consult the appropriate domestic specific Dangerous Goods Regulations for additional shipping requirements.

### Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15. REGULATORY INFORMATION

### Safety, Health and Environmental Regulations

#### Canada

#### WHMIS Classification



Class D2A; D2B

D2A - Very Toxic (Carcinogenicity); D2B - Toxic (Skin irritant; Eye irritant)

## SECTION 16. OTHER INFORMATION

**NFPA Rating**                      **Health - 2**      **Flammability - 0**      **Instability - 0**

**SDS Prepared By**              Bri-Chem Supply Ltd

**Phone No.**                        (403) 269-2800

**Date of Preparation**          January 10, 2016

### Disclaimer

This Health and Safety information is correct to the best of our knowledge and belief at the date of its publication, but we cannot accept liability for any loss, injury or damage which may result from its use. We shall ensure, so far as is reasonably practicable, that any revision of this Data Sheet is sent to all customers to whom we have directly supplied this substance, but must point out that it is the responsibility of any intermediate supplier to ensure that such revision is passed to the ultimate user. The information given in the Data Sheet is designed only as guidance for safe handling, storage, and the use of the substance. It is not a specification nor does it guarantee any specific properties. All chemicals should be handled only by competent personnel, within a controlled environment. Should further information be required, this can be obtained through the sales office whose address is at the top of this data sheet.

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