

SAFETY DATA SHEET

**Section 1: IDENTIFICATION**

**Product Name:** Chrome Free Desco® Deflocculant  
**Material:** 1016808  
**Relevant Identified Uses Supported:** Drilling Fluid Additive  
**Supplier:** Bri-Chem Supply Ltd.  
27075 Acheson Road  
Acheson, AB T7X 6B1  
**Phone Number:** 780-962-9490  
**Emergency Number:** CHEMTREC 800-424-9300 24/7

**Section 2: HAZARD(S) IDENTIFICATION**

**Classification of the Substance or Mixture**

**REGULATION (EC) No 1272/2008**

**Carcinogenicity:** Category 1A  
**H350i:** May cause cancer by inhalation  
**Long-term (Chronic) Aquatic Hazard:** Category 3  
**H412:** Harmful to aquatic life with long lasting effects

**Labeling (REGULATION (EC) No 1272/2008)**

**Hazard Pictograms:**



**Hazard Statements**

**H350i:** May cause cancer by inhalation  
**H412:** Harmful to aquatic life with long lasting effects

**Precautionary Statements**

**Prevention**

**P201:** Obtain special instructions before use  
**P202:** Do not handle until all safety precautions have been read and understood  
**P273:** Avoid release to the environment  
**P280:** Wear protective gloves/ protective clothing/eye protection/ face protection.

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**Response**

**P308 + P313:** If exposed or concerned: Get medical advice/ attention.

**Storage**

**P405:** Store locked up

**Disposal**

**P501:** Dispose of contents/ container to an approved waste disposal plant.

**Hazardous Ingredients Which Must be Listed on the Label:** 14808-60-7 Crystalline Silica

**Additional Labeling:** Restricted to professional users

**Section 3: COMPOSITION / INFORMATION ON INGREDIENTS**

**Substance or Mixture**

**Synonyms:** Drilling mud deflocculant

**Molecular Formula:** Mixture

**Hazardous Ingredients**

Chemical Name	CAS-No. EC-No. Index No.	Classification (REGULATION (EC) No 1272/2008)	Concentration [wt%]
Sulfomethylated Quebracho	68201-64-9 269-229-3	Aquatic Chronic 3; H412	60 - 80
Ferrous Sulfate	17375-41-6	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Irrit. 2; H315	5 - 9
Crystalline Silica	14808-60-7 238-878-4	Carc. 1A; H350 STOT RE 1; H372	0,1 - 1

For the full text of the H-Statements mentioned in this Section, see Section 16.

**Section 4: FIRST-AID MEASURES**

**Description of First-Aid Measures**

**General Advice:** Move out of dangerous area. Show this material safety data sheet to the doctor in attendance.

**If Inhaled:** If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.

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<b>In Case of Eye Contact:</b>	Flush eyes with water as a precaution. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
<b>If Swallowed:</b>	Keep respiratory tract clear. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital.

## Section 5: FIRE-FIGHTING MEASURES

<b>Flash Point:</b>	Not applicable
<b>Autoignition Temperature:</b>	No data available
<b>Extinguishing Media</b>	
<b>Unsuitable Extinguishing Media:</b>	High volume water jet
<b>Special Hazards Arising from the Substance or Mixture</b>	
<b>Specific Hazards During Fire Fighting:</b>	Risks of ignition followed by flame propagation or secondary explosions can be caused by the accumulation of dust, e.g. on floors and ledges.
<b>Advice for Firefighters</b>	
<b>Special Protective Equipment for Fire-Fighters:</b>	Wear self-contained breathing apparatus for firefighting if necessary.
<b>Further Information:</b>	Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Fire and Explosion Protection:</b>	Avoid dust formation. Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Provide appropriate exhaust ventilation at places where dust is formed.
<b>Hazardous Decomposition Products:</b>	Iron Oxides. Sulfur oxides.

## Section 6: ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions, Protective Equipment, and Emergency Procedures</b>	
<b>Personal Precautions:</b>	Use personal protective equipment. Avoid dust formation. Avoid breathing dust.
<b>Environmental Precautions</b>	
<b>Environmental Precautions:</b>	Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.

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

**Methods for Cleaning Up:** Pick up and arrange disposal without creating dust. Clean up promptly by sweeping or vacuum. Keep in suitable, closed containers for disposal.

**Additional Advice:** Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).

**Reference to Other Sections:** For personal protection see section 8. For disposal considerations see Section 13.

**Section 7: HANDLING AND STORAGE**

**Precautions for Safe Handling**

**Advice on Safe Handling:** Avoid formation of respirable particles. Do not breathe vapors/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Dispose of rinse water in accordance with local and national regulations. 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 by themselves be sufficient.

**Advice on Protection against Fire and Explosion:** Avoid dust formation. Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Provide appropriate exhaust ventilation at places where dust is formed.

**Conditions for Safe Storage, Including any Incompatibilities**

**Storage**

**Requirements for Storage Areas and Containers:** Keep container tightly closed in a dry and well-ventilated place. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

**Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Control Parameters**

**Ingredients with Workplace Control Parameters**

**GB**

Components	Basis	Value	Control Parameters	Note
Ferrous Sulfate	GB EH40	TWA	1 mg/m <sup>3</sup>	
	GB EH40	STEL	2 mg/m <sup>3</sup>	
Crystalline Silica	GB EH40	TWA	0,1 mg/m <sup>3</sup>	13, 43, 44, 45, 46, 14, Respirable fraction
	GB EH40	TWA	0,1 mg/m <sup>3</sup>	Carc, Respirable fraction

- 13** For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/4 General methods for sampling and gravimetric analysis or respirable, thoracic and inhalable aerosols.
- 14** Where no specific short-term exposure limit is listed, a figure three times the long-term exposure limit should be used.
- 43** The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m-3 8-hour TWA of inhalable dust or 4 mg.m-3 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed to dust above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limits.
- 44** Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system, and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'.
- 45** Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/4.
- 46** Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with.

**Carc** Capable of causing cancer and/or heritable genetic damage

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**Exposure Controls**

**Engineering Measures:** Adequate ventilation to control airborne concentrations below the exposure guidelines/limits. Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the workplace when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

**Personal Protective Equipment**

**Respiratory Protection:** Wear a supplied-air NIOSH approved respirator unless ventilation or other engineering controls are adequate to maintain minimal oxygen content of 19.5% by volume under normal atmospheric pressure. Wear a NIOSH approved respirator that provides protection when working with this material if exposure to harmful levels of airborne material may occur, such as: Air-Purifying Respirator for Dusts and Mists / P100. Use a positive pressure, air-supplying respirator if there is potential for uncontrolled release, aerosolization, exposure levels are not known, or other circumstances where air purifying respirators may not provide adequate protection.

**Hand Protection:** The suitability for a specific workplace should be discussed with the producers of the protective gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

**Eye Protection:** Eye wash bottle with pure water. Safety glasses.

**Skin and Body Protection:** Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific workplace. Wear as appropriate: Protective suit. Safety shoes.

**Hygiene Measures:** When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

**Section 9: PHYSICAL AND CHEMICAL PROPERTIES****Information on Basic Physical and Chemical Properties****Appearance**

<b>Form:</b>	Powder
<b>Physical State:</b>	Solid
<b>Color:</b>	Fine reddish-brown with small white specks
<b>Odor:</b>	Odorless
<b>Odor Threshold:</b>	Not applicable

**Safety Data**

<b>Flash Point:</b>	Not applicable
<b>Lower Explosion Limit:</b>	Not applicable
<b>Upper Explosion Limit:</b>	Not applicable
<b>Oxidizing Properties:</b>	No
<b>Autoignition Temperature:</b>	No data available
<b>Thermal Decomposition:</b>	No data available
<b>Molecular Formula:</b>	Mixture
<b>Molecular Weight:</b>	Not applicable
<b>pH:</b>	Not applicable
<b>Pour Point:</b>	No data available
<b>Boiling Point/Boiling Range:</b>	Not applicable
<b>Vapor Pressure:</b>	Not applicable
<b>Relative Density:</b>	Not applicable
<b>Density:</b>	1,60 g/cm <sup>3</sup>
<b>Water Solubility:</b>	Partly soluble
<b>Partition Coefficient: n-octanol/water:</b>	No data available
<b>Viscosity, Kinematic:</b>	Not applicable
<b>Relative Vapor Density:</b>	Not applicable
<b>Evaporation Rate:</b>	Not applicable

**Section 10: STABILITY AND REACTIVITY**

<b>Reactivity:</b>	Stable at normal ambient temperature and pressure
<b>Chemical Stability:</b>	This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

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**Possibility of Hazardous Reactions**

<b>Hazardous Reactions:</b>	Hazardous reactions: Hazardous polymerization does not occur. Further information: No decomposition if stored and applied as directed.
<b>Conditions to Avoid:</b>	Generation of dusts
<b>Materials to Avoid:</b>	May react with oxygen and strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.
<b>Thermal Decomposition:</b>	No data available
<b>Hazardous Decomposition Products:</b>	Iron oxides, Sulfur oxides.
<b>Other Data:</b>	No decomposition if stored and applied as directed

**Section 11: TOXICOLOGICAL INFORMATION**

**Information on Toxicological Effects**

**Chrome Free Desco® Deflocculant**

**Acute Oral Toxicity:** Acute toxicity estimate: 3.544 mg/kg  
Method: Calculation method

**Acute Dermal Toxicity:** LD50: unknown

**Skin Irritation:** May irritate skin

**Eye Irritation:** May irritate eyes

**Repeated Dose Toxicity**

**Sulfomethylated Quebracho:** Species: Rat, male  
Sex: male  
Application Route: oral gavage  
Dose: 100, 300, 1000 mg/kg  
Exposure time: 32 d  
Number of exposures: Daily  
NOEL: 1.000 mg/kg  
Method: OECD Guideline 422  
No adverse effects expected

Species: Rat, female  
Sex: female  
Application Route: oral gavage  
Dose: 100, 300, 1000 mg/kg  
Exposure time: 39 - 47 d  
Number of exposures: Daily  
NOEL: 1.000 mg/kg  
Method: OECD Guideline 422  
No adverse effects expected



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**Genotoxicity in Vitro**

**Sulfomethylated Quebracho:** Test Type: Chromosome aberration test in vitro.  
Metabolic activation: with and without metabolic activation  
Method: OECD Guideline 473  
Result: negative

**Reproductive Toxicity**

**Sulfomethylated Quebracho:** Species: Rat  
Sex: male  
Application Route: oral gavage  
Dose: 100, 300, 1000 mg/kg  
Exposure time: 32 d  
Number of exposures: Daily  
Method: OECD Guideline 422  
NOAEL Parent: 1.000 mg/kg  
Fertility and developmental toxicity tests did not reveal any effect on reproduction

Species: Rat  
Sex: female  
Application Route: oral gavage  
Dose: 100, 300, 1000 mg/kg  
Exposure time: 39 - 47 d  
Number of exposures: Daily  
Method: OECD Guideline 422  
NOAEL Parent: 1.000 mg/kg  
NOAEL F1: 1.000 mg/kg  
Fertility and developmental toxicity tests did not reveal any effect on reproduction

**Chrome Free Desco® Deflocculant**

**Aspiration Toxicity:** No aspiration toxicity classification

**CMR Effects**

**Crystalline Silica:** Carcinogenicity: Human carcinogen

**Further Information:** No data available

**Section 12: ECOLOGICAL INFORMATION**

**Toxicity**

**Ecotoxicity Effects**

**Toxicity to Fish**

**Sulfomethylated Quebracho:** LL50: > 1.800 mg/l  
Exposure time: 96 h  
Species: Scophthalmus maximus (Flatfish, Flounder)  
Method: OECD Test Guideline 203

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**Ferrous Sulfate:** LL50: > 6,25 mg/l  
Exposure time: 96 h  
Species: Cyprinodon variegatus (sheepshead minnow)  
semi-static test Method: OECD Test Guideline 203

### Toxicity to Daphnia and Other Aquatic Invertebrates

**Sulfomethylated Quebracho:** EL50: 73,2 mg/l  
Exposure time: 48 h  
Species: Acartia tonsa (Marine Copepod)  
Method: ISO TC147/SC5/WG2

**Ferrous Sulfate:** LC50: 190 mg/l  
Exposure time: 48 h  
Species: Acartia tonsa (Marine Copepod)  
Method: ISO TC147/SC5/WG2

### Toxicity to Algae

**Sulfomethylated Quebracho:** ErC50: > 100 mg/l  
Exposure time: 72 h  
Species: Desmodesmus subspicatus (green algae)  
Method: OECD Test Guideline 201  
EbC50: 79 mg/l  
Exposure time: 72 h  
Species: Desmodesmus subspicatus (green algae)  
Method: OECD Test Guideline 201

**Ferrous Sulfate:** EL50: 45 mg/l  
Exposure time: 72 h  
Species: Skeletonema costatum (Marine Algae)  
Method: ISO 10253

### Persistence and Degradability

**Biodegradability:** Not applicable

### Bioaccumulative Potential

### Elimination Information (Persistence and Degradability)

**Bioaccumulation:** This material is not expected to bioaccumulate

### Mobility in Soil

**Mobility:** No data available

### Results of PBT and vPvB Assessment

**Results of PBT Assessment:** This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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**Other Adverse Effects**

**Additional Ecological Information:** Harmful to aquatic life with long lasting effects

**Ecotoxicology Assessment**

**Short-term (Acute) Aquatic Hazard Sulfomethylated Quebracho:** Harmful to aquatic life

**Long-term (Acute) Aquatic Hazard Sulfomethylated Quebracho:** Harmful to aquatic life with long lasting effects

**Section 13: DISPOSAL CONSIDERATIONS**

**Waste Treatment Methods:** The information in this SDS pertains only to the product as shipped. Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

**Product:** Do not dispose of waste into sewer. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.

**Contaminated Packaging:** Empty remaining contents. Dispose of as unused product. Do not re-use empty containers.

**Section 14: TRANSPORT INFORMATION**

**Transport Information**

The shipping descriptions shown here are for bulk shipments only, and may not apply to shipments in non-bulk packages (see regulatory definition).

Consult the appropriate domestic or international mode-specific and quantity-specific Dangerous Goods Regulations for additional shipping description requirements (e.g., technical name or names, etc.) Therefore, the information shown here, may not always agree with the bill of lading shipping description for the material. Flashpoints for the material may vary slightly between the SDS and the bill of lading.

**US DOT (Unites States Department of Transportation):** UN3077, environmentally hazardous substances, solid. N.O.S, (Ferrous Sulfate), 9, III, RQ (Ferrous Sulfate).

**IMO / IMDG (International Maritime Dangerous Goods):** Not regulated as a hazardous material or dangerous goods for transportation by this agency.

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<b>IATA (International Air Transport Association):</b>	Not regulated as a hazardous material or dangerous goods for transportation by this agency.
<b>ADR (Agreement on Dangerous Goods by Road (Europe)):</b>	Not regulated as a hazardous material or dangerous goods for transportation by this agency.
<b>RID (Regulations Concerning the International Transport of Dangerous Goods (Europe)):</b>	Not regulated as a hazardous material or dangerous goods for transportation by this agency.
<b>AND (European Agreement Concerning The International Carriage of Dangerous Goods by Inland Waterways):</b>	Not regulated as a hazardous material or dangerous goods for transportation by this agency.
<b>Maritime Transport in Bulk According to IMO Instruments</b>	
Maritime Transport in Bulk According to IMO Instruments	

**Section 15: REGULATORY INFORMATION**

**Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture National Legislation**

Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).

**Water Contaminating Class (Germany):** WGK 2 water endangering

**Major Accident Hazard Legislation:** 96/82/EC Update: Not applicable.

**Notification Status**

**Europe REACH:** A substance or substances in this product is not registered or notified to be registered. Importation or manufacture of this product is still permitted provided that it does not exceed the REACH minimum threshold quantity of the non-regulated substances.

**Switzerland CH INV:** Not in compliance with the inventory

**Unites States of America (USA) TSCA:** On or in compliance with the active portion of the TSCA inventory

**Canada DSL:** All components of this product are on the Canadian DSL

**Australia AICS:** On the inventory, or in compliance with the inventory.

**New Zealand NZIoC:** On the inventory, or in compliance with the inventory.

**Japan ENCS:** Not in compliance with the inventory

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**Korea KECI:** A substance(s) in this product was not registered, notified to be registered, or exempted from registration by CPChem according to K-REACH regulations. Importation or manufacture of this product is still permitted provided the Korean Importer of Record has themselves notified the substance or the exported amount does not exceed the minimum threshold quantity of the non-registered substance(s).

**Philippines PICCS:** Not in compliance with the inventory

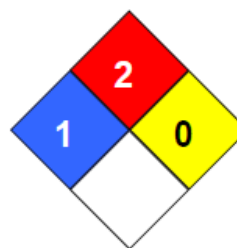
**China IECSC:** On the inventory, or in compliance with the inventory.

**Taiwan TCSI:** Not in compliance with the inventory

**Section 16: OTHER INFORMATION**

**NFPA Classification:** Health Hazard: 1  
Fire Hazard: 2  
Reactivity Hazard: 0

**Further Information**  
**Legacy SDS Number:** 59420



Significant changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information in this SDS pertains only to the product as shipped.

**Full Text of H-Statements Referred to under Sections 2 and 3**

- H302 Harmful if swallowed
- H315 Causes skin irritation
- H319 Causes serious eye irritation
- H350 May cause cancer
- H350i May cause cancer by inhalation
- H372 Causes damage to organs through prolonged or repeated exposure if inhaled
- H412 Harmful to aquatic life with long lasting effects

**Disclaimer:**

The information contained herein is based on data available to us and is believed to be true and accurate. However, no guarantee or warranty is provided, expressed or implied, by the company or its subsidiaries regarding accuracy of the information, the hazards connected with the use of the material, or the results to be obtained from the use thereof. Since the use of this product is within the exclusive control of the user, we do not assume any responsibility and expressly disclaim any liability for any use of this product. It is the user's responsibility to determine the conditions of safe use, storage, and disposal of the product. Compliance with all applicable federal, provincial, and local regulations remains the responsibility of the user.

**Prepared by:** Bri-Chem Supply Ltd.

**Revision Date:** June 17, 2024