

SECTION I: IDENTIFICATION OF PRODUCT

COMPANY: **Diversity Technologies Corp.** DATE: **April 17, 2015**
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PRODUCT NAME: **CF Desco® II (Deflocculent)**

PRODUCT USE: Oilwell drilling fluid additive.
 CHEMICAL FAMILY: Mixture CAS #: Mixture

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)

WHMIS CLASSIFICATION: D2A; D2B
 WORKPLACE HAZARD: Potential carcinogen; skin and eye irritant; dust explosion hazard

TRANSPORTATION OF DANGEROUS GOODS (TDG)

PROPER SHIPPING NAME: Not regulated under TDG
 TDG CLASSIFICATION: Not applicable
 UN NUMBER (PIN): Not applicable
 PACKING GROUP: Not applicable

SECTION II: HAZARDOUS INGREDIENTS

INGREDIENT	% (w/w)	CAS NUMBER	LD ₅₀ Oral-Rat	LC ₅₀ Inhal-Rat	ACGIH-TLV
Ferrous sulfate	5 - 10	17375-41-6	Not available	Not available	1 mg/m ³ (as Fe)
Crystalline silica quartz	1 - 5	14808-60-7	Not available	Not available	0.025 mg/m ³

SECTION III: HEALTH HAZARDS

ROUTE OF ENTRY: EYE CONTACT SKIN CONTACT INHALATION INGESTION
 EYE CONTACT: May cause severe irritation and could cause prolonged impairment of vision. The degree of injury depends on the amount of material that gets into the eye and the speed and thoroughness of the first aid treatment. May scratch the surface of the eye.
 SKIN CONTACT: May cause severe irritation, redness and itching. Not expected to be harmful to the internal organs if absorbed through the skin.
 INGESTION: May be harmful if swallowed. May be irritating to the mouth, throat and stomach. Symptoms may include nausea, vomiting and diarrhea.

INHALATION:	May cause irritation of the upper respiratory tract. This product contains crystalline silica. Breathing silica containing dust may not cause noticeable injury or illness even though permanent lung damage may be occurring. Chronic inhalation may cause silicosis, a progressive, disabling and sometimes fatal lung disease. Chronic inhalation exposure to crystalline silica quartz has been observed to cause lymph node effects, kidney effects and auto-immune disease. Long term exposure to iron dusts may cause a benign lung condition (siderosis) in which there are lung changes identifiable by x-ray imaging, without significant impairment of lung function.
CARCINOGENICITY:	Product contains crystalline silica, when inhaled from occupational sources, is considered as a human carcinogen by IARC (Class 1) and by NTP. ACGIH classifies crystalline silica, quartz, as a suspected human carcinogen (A2).
TERATOGENICITY:	No information available.
REPRODUCTIVE TOXICITY:	No information available.
MUTAGENICITY:	Crystalline silica has been shown to cause mutagenic effects in human cells in-vitro.
SYNERGISTIC PRODUCTS:	No information available.

SECTION IV: FIRST AID MEASURES

SKIN CONTACT:	Flush with gently flowing warm water for 15 minutes, or until irritation ceases, holding the eyelids open. If irritation persists obtain medical attention.
EYE CONTACT:	Wash thoroughly with water and soap. If irritation persists get medical attention.
INGESTION:	Do not induce vomiting. Rinse mouth and give a glass of water. Seek medical attention. Never give anything by mouth if patient is unconscious, rapidly losing consciousness or convulsing.
INHALATION:	Move to fresh air. Apply oxygen or artificial respiration if required. If breathing difficulties or distress continues obtain medical attention.

SECTION V: PHYSICAL DATA

APPEARANCE AND ODOUR:	Fine reddish-brown powder with small white specks; odourless
SPECIFIC GRAVITY:	1.5 (relative density)
BOILING POINT (°C):	Not applicable
MELTING POINT (°C):	Not applicable
SOLUBILITY IN WATER:	Partly soluble
PERCENT VOLATILE BY VOLUME:	Not applicable
EVAPORATION RATE:	Not applicable
VAPOUR PRESSURE (mmHg):	Not applicable
VAPOUR DENSITY (air = 1):	Not applicable
	pH: Not available

BULK DENSITY: Not available

SECTION VI: FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: Not applicable
FLAMMABLE LIMITS: Not applicable
EXTINGUISHING MEDIA: CO₂, water, mist, foam
SPECIAL FIRE FIGHTING PROCEDURES: Self-contained breathing apparatus required for fire-fighting personnel.
UNUSUAL FIRE AND EXPLOSION HAZARDS: If in a finely divided and suspended state, treat as a flammable dust.
HAZARDOUS COMBUSTION PRODUCTS: Carbon, sulfur and iron oxides may be released when burned.

SECTION VII: REACTIVITY DATA

STABILITY: STABLE UNSTABLE
INCOMPATIBILITY (CONDITIONS TO AVOID): May react with strong oxidizing agents.
CONDITIONS OF REACTIVITY: Not established.
HAZARDOUS DECOMPOSITION PRODUCTS: Not available
HAZARDOUS POLYMERIZATION: WILL NOT OCCUR MAY OCCUR

SECTION VIII: PREVENTIVE MEASURES

SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: Suggest NIOSH approved dust mask be worn for levels below TLV. Use approved respirator with dust cartridges for levels above TLV.
VENTILATION: Use only in well ventilated area. Use local exhaust ventilation, process enclosure and/or other engineering controls to maintain levels of airborne dust below TLV.
PROTECTIVE GLOVES: Suggest rubber or neoprene
EYE PROTECTION: Suggest safety glasses with side shields or chemical goggles.
OTHER PROTECTIVE EQUIPMENT (SPECIFY): It is suggested to use chemical resistant protective clothing when handling this product. Ensure eyewash station and emergency shower are available.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Avoid ingestion. Avoid skin and eye contact. Do not breathe the dust. Wash thoroughly after handling. Practice reasonable caution and personal cleanliness. Launder exposed clothing before reuse. Wear suitable protection for eyes and skin when handling. Store in dry, well-ventilated area away from incompatibles and ignition sources. Empty packages contain small amounts of hazardous material and should be handled as if full.

STEPS TO BE TAKEN IN CASE THE MATERIAL IS SPILLED OR RELEASED

Use appropriate safety equipment. Avoid all bodily contact with spilled material. Vacuum or sweep up in a manner that prevents the creation of airborne dust. Collect uncontaminated material for repackaging. Collect contaminated material in approved containers for disposal. Flush spill area with water. Do not allow material to enter storm sewers or storm water inlets.

WASTE DISPOSAL METHOD

Dispose in accordance with federal, provincial and local regulations. It is the responsibility of the end user to determine if material meets the criteria of hazardous waste at the time of disposal.

SECTION IX: PREPARATION

The information contains herein is given in good faith, but no warranty, expressed or implied, is made.

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