

SECTION 1: IDENTIFICATION

PRODUCT IDENTIFIER: **ALUMINUM SULFATE**
OTHER MEANS OF IDENTIFICATION: Alum
RECOMMENDED USE: Drilling fluid additive
RESTRICTIONS ON USE: None known
SUPPLIER IDENTIFIER: **Di-Corp**
8750-53 Ave
Edmonton, AB T6E 5G2
780-440-4923
EMERGENCY PHONE NUMBER: 780-468-4064 (24 hr)

SECTION 2: HAZARD IDENTIFICATION

CLASSIFICATION: Serious eye damage / eye irritation – Category 1

LABEL SYMBOLS:



SIGNAL WORD: DANGER

CLASSIFICATION INFORMATION: Causes serious eye damage.

PRECAUTIONARY STATEMENTS:

Wear protective gloves/protective clothing/eye protection/face protection.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

OTHER HAZARDS:

None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS NUMBER	CONCENTRATION
Aluminum sulfate	10043-01-3	57 - 60% (w/w)

SECTION 4: FIRST AID MEASURES

SKIN CONTACT: Wash thoroughly with water and soap. If irritation occurs and persists, obtain medical attention. Remove and launder contaminated clothing before rewearing.

EYE CONTACT: Immediately flush with gently flowing warm water for minimum 30 minutes. Hold eyelids open to ensure thorough flushing. Neutral saline may be used as soon as it is available. Obtain medical attention when flushing is complete and no further irritation is felt.

INGESTION: Do not induce vomiting. Rinse mouth with water. Give one to two glasses of water dilute. Obtain medical attention immediately. Never give anything by mouth if victim is unconscious, rapidly losing consciousness or convulsing.

INHALATION: Move to area free from dust. If victim is not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. If breathing difficulties or distress continues obtain medical attention.

MOST IMPORTANT SYMPTOMS / EFFECTS: Causes serious eye damage / eye irritation.

IMMEDIATE MEDICAL ATTENTION / SPECIAL TREATMENT: Treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA:	Use media appropriate for packaging and surrounding materials.
UNSUITABLE EXTINGUISHING MEDIA:	None.
SPECIFIC FIRE HAZARDS:	Noncombustible. At above 760°C, or heated in open flame, hazardous fumes are released.
HAZARDOUS COMBUSTION PRODUCTS:	Oxides of sulphur, oxides of aluminum.
SPECIAL PROTECTIVE EQUIPMENT & PRECAUTIONS:	Self-contained breathing apparatus required for fire-fighting personnel.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Wear appropriate safety gear including eye and respiratory protection. Prevent material from entering public waterways and sewers.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN UP

Collect dry material by sweeping and shoveling; liquid material can be removed with a vacuum truck. Collect uncontaminated material for repackaging. Collect contaminated material in an approved container for disposal. Flush spill area thoroughly with water.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

Avoid contact with eyes or prolonged skin contact. Avoid breathing dust. Use good personal hygiene and housekeeping. Launder contaminated clothing before reuse.

CONDITIONS FOR SAFE STORAGE & INCOMPATIBILITIES

Store in a cool, dry, well-ventilated place. Avoid moist air and strong bases. Obey hazard warnings and handle empty containers as if they were full.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS:	OSHA PEL-TWA = 2 mg/m ³
ENGINEERING CONTROLS:	Use only with adequate ventilation. If user operations generate dust use process enclosure, local exhaust ventilation or other engineering controls to keep worker exposure below limits.
	PERSONAL PROTECTIVE MEASURES
RESPIRATORY PROTECTION:	Approved dust masks required for dust levels below TLV. Use a properly fitted particulate filter respirator complying with an approved standard if airborne concentrations exceeds TLV or if a risk assessment indicates this is necessary.
PROTECTIVE GLOVES:	Rubber gauntlets recommended.
EYE PROTECTION:	Wear tight fitting chemical goggles. Do not wear contact lenses.
OTHER PROTECTIVE EQUIPMENT (SPECIFY):	Protective clothing as required to prevent contact. Ensure eye-wash station and emergency shower are available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	White granules
ODOUR:	Odourless
ODOUR THRESHOLD:	Not applicable
pH:	3.5
MELTING POINT / FREEZING POINT:	Not applicable
BOILING POINT / RANGE:	Not applicable
FLASH POINT:	Not applicable
EVAPORATION RATE:	Not applicable
FLAMMABILITY:	Not applicable

FLAMMABILITY / EXPLOSIVE LIMITS:	Not applicable
VAPOUR PRESSURE:	Not applicable
VAPOUR DENSITY:	Not applicable
RELATIVE DENSITY:	Not available
SOLUBILITY:	Soluble in water
PARTITION COEFFICIENT:	Not applicable
AUTO-IGNITION TEMPERATURE:	Not applicable
DECOMPOSITION TEMPERATURE:	650 – 760°C
VISCOSITY:	Not applicable

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY:	Not available.
CHEMICAL STABILITY:	Stable under normal conditions of transport, storage and use.
POSSIBILITY OF HAZARDOUS REACTIONS:	Polymerization will not occur.
CONDITIONS TO AVOID:	Exposure to air or moisture over prolonged periods.
INCOMPATIBLE MATERIALS:	Strong bases.
HAZARDOUS DECOMPOSITION PRODUCTS:	Oxides of sulphur and oxides of aluminum.

SECTION 11: TOXICOLOGICAL INFORMATION

PRODUCT TOXICITY:	LD50 (Oral, rat) = 3216 mg/kg LD50 (Dermal, rabbit) = Not available LC50 (Inhal, rat) = Not available
SKIN CONTACT:	Non-irritating to intact skin. Minor irritation may occur on abraded skin. Prolonged contact may cause irritation (red, dry, cracked skin).
EYE CONTACT:	Dust and concentrated solutions may cause moderate to severe eye irritation.
INGESTION:	Although low in toxicity, ingestion can be harmful. May cause nausea, vomiting, stomach ache and diarrhea.
INHALATION:	Excessive levels of airborne dust may irritate the mucous membranes and upper respiratory tract.
CARCINOGENICITY:	Not listed by NTP, IARC, OSHA or ACGIH.
TERATOGENICITY:	No information available.
REPRODUCTIVE TOXICITY:	Not toxic based on available information.
MUTAGENICITY:	Not mutagenic based on available information.
CHRONIC TOXICITY:	No information available.
TARGET ORGAN EFFECTS:	Not available.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY:	LC50 (pimephales promelas) = 26.7 – 49.4 mg/L/96hr EC50 (daphnia magna) = 136 mg/L/15 minutes
PERSISTENCE AND DEGRADABILITY:	Not applicable to inorganic substances.
BIOACCUMULATIVE POTENTIAL:	Not available.
MOBILITY IN SOIL:	Not available.
OTHER ADVERSE EFFECTS:	May be harmful to aquatic life. Toxicity is primarily associated with acidic pH.

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of 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. Empty containers, which have not been cleaned and purged, contain residual hazardous material and must be recycled, or disposed of, in accordance with local regulations.

SECTION 14: TRANSPORTATION INFORMATION

TDG	Not regulated
DOT	Not regulated
IATA	Not regulated
IMDG	Not regulated
UN NUMBER:	Not applicable
PROPER SHIPPING NAME:	Not applicable
CLASS:	Not applicable
PACKING GROUP:	Not applicable
IMDG HAZARDS:	Not a marine pollutant
BULK TRANSPORT:	Not regulated
SPECIAL PRECAUTIONS:	None

SECTION 15: REGULATORY INFORMATION

DSL:	Listed
WHMIS CLASS:	D2B
TSCA:	Listed

SECTION 16: OTHER INFORMATION

REVISION DATE:	March 8, 2019
REPLACES:	None

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