

## SECTION 1: IDENTIFICATION

PRODUCT IDENTIFIER: **Sulphamic Acid**  
OTHER MEANS OF IDENTIFICATION: **None**  
RECOMMENDED USE: **Oilwell drilling fluid and cement additive**  
RESTRICTIONS ON USE: **None known**  
SUPPLIER IDENTIFIER: **Di-Corp**  
**8750-53 Ave**  
**Edmonton, AB T6E 5G2**  
**780-440-4923**  
EMERGENCY PHONE NUMBER: (24 hr) **1-888-CANUTEC (226-8832), 613-996-6666 or \*666 on a cellular phone**

## SECTION 2: HAZARD IDENTIFICATION

CLASSIFICATION: Corrosive to metals – Category 1  
Skin irritation – Category 2  
Eye irritation – Category 2

LABEL SYMBOLS: 

SIGNAL WORD: **WARNING**

CLASSIFICATION INFORMATION:

May be corrosive to metals.  
Causes skin irritation.  
Causes serious eye irritation.  
Keep only in original packaging.  
Wash thoroughly after handling.  
Wear protective gloves/protective clothing/eye protection/face protection.  
IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical attention/advice.  
Take off contaminated clothing and wash it before reuse.  
IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

PRECAUTIONARY STATEMENTS:

Store in a corrosion resistant container.  
Dispose of contents/container in accordance with local, regional, national, and/or international regulations.

OTHER HAZARDS:

None known.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS NUMBER	CONCENTRATION
Sulphamic acid	5329-14-6	>99.8% (w/w)

## SECTION 4: FIRST AID MEASURES

SKIN CONTACT: Quickly and gently brush away excess chemical. Thoroughly flush with running water while removing contaminated clothing. If irritation develops and persists, obtain medical attention.

EYE CONTACT: Flush with gently flowing warm water for minimum 20 minutes. Hold eyelids open to ensure thorough flushing. Obtain medical attention when flushing is complete and no further irritation is felt.

INGESTION:	Do not induce vomiting. Rinse mouth with water. Give 1 to 2 glasses of water. Obtain medical attention. Never give anything by mouth if patient is unconscious, rapidly losing consciousness or convulsing.
INHALATION:	Move to area free from dust. Obtain immediate medical attention. If victim is not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
MOST IMPORTANT SYMPTOMS/EFFECTS: IMMEDIATE MEDICAL ATTENTION/SPECIAL TREATMENT:	May cause moderate to severe eye irritation. May cause skin irritation. Treat symptomatically.

## SECTION 5: FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA:	Carbon dioxide, dry chemical powder, appropriate foam, water spray or fog.
UNSUITABLE EXTINGUISHING MEDIA:	None known.
SPECIFIC FIRE HAZARDS:	Emits toxic fumes under fire conditions.
HAZARDOUS COMBUSTION PRODUCTS:	Sulphur oxides and ammonia.
SPECIAL PROTECTIVE EQUIPMENT & PRECAUTIONS:	Self-contained breathing apparatus required for fire-fighting personnel. Move material from fire area if possible to do so without risk.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Material is corrosive: Use appropriate safety equipment. Eliminate ignition sources. Avoid creating dust clouds. Sulphamic acid is an acute environmental toxic; prevent material from entering sewers or waterways.

### METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN UP

Collect dry material by 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

This product is corrosive. Wear personal protective equipment. Wash thoroughly after handling. Avoid contact with skin and eyes. Avoid ingestion. Wash clothing before reuse. Avoid creating dust clouds.

### CONDITIONS FOR SAFE STORAGE & INCOMPATIBILITIES

Store in cool, dry area away from incompatibles. Keep container tightly closed and properly labelled. Aqueous solutions of sulphamic acid can, if in contact with reactive metal (iron, zinc, aluminum) form hydrogen which may create explosive mixtures. Avoid creating dust clouds when handling. Empty packages contain residual hazardous material and should be handled as if full.

## SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS:	Not established.
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. Ensure ventilation equipment is corrosion resistant and separate from other exhaust ventilation systems.

### 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 powder or granules  
ODOUR: Odourless  
ODOUR THRESHOLD: Not applicable.  
pH: 1.18 (10 g/L solution)  
MELTING POINT / FREEZING POINT: 205°C  
BOILING POINT / RANGE: Not applicable (decomposes)  
FLASH POINT: Not applicable  
EVAPORATION RATE: Not applicable  
FLAMMABILITY: Not applicable  
FLAMMABILITY / EXPLOSIVE LIMITS: Not applicable  
VAPOUR PRESSURE: 0.78 Pa @ 20°C  
VAPOUR DENSITY: Not available  
RELATIVE DENSITY: 2.15 g/cm<sup>3</sup> @ 25°C  
SOLUBILITY: Soluble in water (181.4 g/L @ 20°C)  
PARTITION COEFFICIENT: Not available  
AUTO-IGNITION TEMPERATURE: Not applicable  
DECOMPOSITION TEMPERATURE: 209°C  
VISCOSITY: Not applicable

## SECTION 10: STABILITY AND REACTIVITY

REACTIVITY: Not available.  
CHEMICAL STABILITY: Stable.  
POSSIBILITY OF HAZARDOUS REACTIONS: May react violently with nitrates and nitric acid, sometimes even leading to explosions.  
CONDITIONS TO AVOID: Avoid cyanides, nitrates, sulfides, chlorine, hypochlorous acid or hypochlorite.  
INCOMPATIBLE MATERIALS: Not available.  
HAZARDOUS DECOMPOSITION PRODUCTS: May react with metals generating explosive hydrogen gas.

## SECTION 11: TOXICOLOGICAL INFORMATION

PRODUCT TOXICITY: LD50 (oral, rat) = 3160 mg/kg

SKIN CONTACT: May cause irritation. Prolonged contact may cause inflammation and blistering.  
EYE CONTACT: May cause moderate to severe irritation according to animal testing. Prolonged contact may cause corneal damage and possibly blindness.  
INGESTION: May cause burns to mouth, throat and esophagus.  
INHALATION: Dusts and mists from solutions may cause temporary irritation of the nose and throat. The severity of these effects would depend on the airborne concentration, concentration of the solution and the duration of exposure.  
CARCINOGENICITY: Not considered to be carcinogenic (NTP, IARC, or OSHA).  
TERATOGENICITY: No information available.  
REPRODUCTIVE TOXICITY: No information available.  
MUTAGENICITY: No information available.  
CHRONIC TOXICITY: No information available.

TARGET ORGAN EFFECTS: Not available.

## SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY: Fish: LC50 (Pimephales promelas): 70.3 mg/L/96 hr (OECD TG 203, 1981)  
Daphnia: EC50 (Daphnia magna): 71.6 mg/L/24 hr (OECD TG 202, 2010)  
Algae: ErC50: 48 mg/L/72 hr (OECD TG 201, 2010)  
Micro-organisms: EC50: > 200 mg/L/3 hr (OECD TG 209, 2010)

PERSISTENCE AND DEGRADABILITY: Sulphamic acid is stable in water at pH 4, 7 and 9 at 25 °C, with a half-life greater than one year. Sulphamic acid is an inorganic substance, so the biodegradability criterion is not applicable.

BIOACCUMULATIVE POTENTIAL: Not applicable. Sulphamic acid is an inorganic substance with high water solubility and without heavy metal, which indicates it has no potential of bio-accumulation.

MOBILITY IN SOIL: Not applicable.

OTHER ADVERSE EFFECTS: Not available.

## 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 Regulated  
DOT Regulated  
IATA Regulated  
IMDG Regulated  
UN NUMBER: UN2967  
PROPER SHIPPING NAME: SULPHAMIC ACID  
CLASS: 8  
PACKING GROUP: III  
IMDG HAZARDS: Not applicable  
BULK TRANSPORT: Not applicable  
SPECIAL PRECAUTIONS: None

## SECTION 15: REGULATORY INFORMATION

DSL: On the list.  
WHMIS CLASS: E  
TSCA: On the list.

## SECTION 16: OTHER INFORMATION

REVISION DATE: April 13, 2018  
REPLACES: None

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