DI-CORP
DOWN TO EARTH BUSINESS

SAFETY DATA SHEET
SODIUM METASILICATE

SECTION 1: IDENTIFICATION

PRODUCT IDENTIFIER:	**Sodium Metasilicate**
OTHER MEANS OF IDENTIFICATION:	SMS: Disodium metasilicate: Metso Beads: Disodium Trioxosilicate
RECOMMENDED USE:	Oilwell cement additive
RESTRICTIONS ON USE:	None known
SUPPLIER IDENTIFIER:	**Di-Corp** **8750-53 Ave** **Edmonton, AB T6E 5G2** **780-440-4923**
EMERGENCY PHONE NUMBER 24hr:	**780-468-4064 or**
TRANSPORTATION EMERGENCY NUMBER:	**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 corrosion – Category 1A Serious eye damage – Category 1 STOT – SE- Category 3
LABEL SYMBOLS:	
SIGNAL WORD:	DANGER
CLASSIFICATION INFORMATION:	May be corrosive to metals. Causes severe skin burns and eye damage. May cause respiratory irritation.
OTHER HAZARDS:	Can etch glass if not promptly removed.
PRECAUTIONARY STATEMENTS:	**PRECAUTIONS** Do not breathe dust. Wash hands, face and exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Keep container tightly closed. Use only outdoors or in a well-ventilated area. **RESPONSE** IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Rinse mouth. IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a Poison Center or doctor if you feel unwell. 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 or physician. **STORAGE** Store In a corrosion resistant container. Store locked up. Store in a well-ventilated place. Keep container tightly closed. **DISPOSAL** Dispose of contents/container in accordance with local, regional, national, and/or international regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS NUMBER	CONCENTRATION
Sodium metasilicate, anhydrous	6834-92-0	100

SECTION 4: FIRST AID MEASURES

SKIN CONTACT:	Quickly and gently brush away excess chemical. Thoroughly flush with running water while removing contaminated clothing. Obtain medical attention.
EYE CONTACT:	Flush with gently flowing warm water for minimum 15 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. Obtain immediate medical attention. If immediate medical attention is not available; rinse mouth thoroughly with water then give one glass of water. If spontaneous vomiting occurs keep head below hips to prevent aspiration of the vomit into the lungs. 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:	ACUTE: Inhalation is expected to cause irritation of the nose and throat. May cause severe skin burns depending on concentration of the material and duration. May cause severe eye irritation and eye damage if first aid is not promptly available. Ingestion may cause burns to the mouth, throat and stomach. CHRONIC: Prolonged inhalation exposures may result in upper respiratory irritation and ulceration of the nasal passage. Long-term skin contact may cause dermatitis.
IMMEDIATE MEDICAL ATTENTION / SPECIAL TREATMENT	Immediate first aid or medical attention is required to reduce the chance of permanent injury due to eye contact or skin contact. If swallowed, contact emergency services or Poison Control Center immediately. Treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA:	Use media appropriate for packaging and surrounding materials.
UNSUITABLE EXTINGUISHING MEDIA:	None known.
SPECIFIC FIRE HAZARDS:	None.
HAZARDOUS COMBUSTION PRODUCTS:	Not available
SPECIAL PROTECTIVE EQUIPMENT & PRECAUTIONS:	Chemical protective clothing (e.g. chemical splash suit) and positive pressure self-contained breathing apparatus (NIOSH approved or equivalent) may be necessary.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIMENT AND EMERGENCY PROCEDURES

Use appropriate safety equipment. Evacuate unnecessary personnel. Avoid contact with spilled material.

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. Do not flush to sewer. Dissolved unneutralized sodium metasilicate has a high pH (alkaline) and will be harmful to aquatic life. Notify appropriate regulatory and emergency agencies.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

Avoid creating dust. Keep containers closed; use adequate ventilation. Do not get in eyes, on skin, or clothing. Avoid ingestion. Do not inhale dust. Wash thoroughly after handling. Wash contaminated clothing before re-use. Keep containers closed.

CONDITIONS FOR SAFE STORAGE & INCOMPATIBILITIES

Store in cool, dry area separate from acids, reactive metals and ammonium salts. This product can absorb water from the air. In case of high humidity or storage for extended periods of time, use plastic bags to enclose product containers to avoid caking. Packaged inventory should be used on a first in, first out basis (FIFO). Empty containers contain residual hazardous material and should be handled and stored as if full.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS:	No OEL assigned.
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:	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 beads
ODOUR:	Odourless
ODOUR THRESHOLD:	Not applicable
pH:	13.0
MELTING POINT / FREEZING POINT:	1088°C
BOILING POINT / RANGE:	Not available
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
PARTION COEFFICIENT:	Not available
AUTO-IGNITION TEMPERATURE:	Not applicable
DECOMPOSITION TEMPERATURE:	Not applicable
VISCOSITY:	Not available

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY:	Aqueous solutions will react with metals to evolve hydrogen gas which can form an explosive mixture with air.
CHEMICAL STABILITY:	This product is hygroscopic.
POSSIBILITY OF HAZARDOUS REACTIONS:	Will not polymerize.
CONDITIONS TO AVOID:	Not available.
INCOMPATIBLE MATERIALS:	Gels, and generates heat, when mixed with acids. Flammable hydrogen gas may be produced on prolonged contact with metals such as aluminum, tin, lead or zinc. May react with ammonium salt solutions resulting in evolution of ammonia gas.
HAZARDOUS DECOMPOSITION PRODUCTS:	May react with metals generating explosive hydrogen gas.

SECTION 11: TOXICOLOGICAL INFORMATION

PRODUCT TOXICITY:	LD50 (oral, rat) = 1152 – 1349 mg/kg. LD50 (dermal, rat) >5000 mg/kg. LC50 (inhal, rat) >2.06 g/m^3/4hr
SKIN CONTACT:	Corrosive! May cause severe burns and tissue destruction.
EYE CONTACT:	Corrosive! May cause severe damage including burns and blindness. Severity of effects depends on concentration and how soon after exposure the eyes are washed.
INGESTION:	Corrosive! May cause severe burns and complete tissue perforation of mucous membranes of mouth, throat and stomach.
INHALATION:	Exposure to powder, vapour, mist or liquid can produce burns of the respiratory tract.
CARCINOGENICITY:	No information available.
TERATOGENICITY:	No information available.
REPRODUCTIVE TOXICITY:	No information available.
MUTAGENICITY:	No information available.
CHRONIC TOXICITY:	No information available.
TARGET ORGAN EFFECTS:	Irritation of the respiratory system.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY:	LC50 – (fish) = 2320 mg/L/96hr EC50 – (daphnia magna) = 1700 mg/L/48hr
PERSISTENCE AND DEGRADABILITY:	Not applicable to inorganic substances.
BIOACCUMULATIVE POTENTIAL:	This product has no potential for bioaccumulation.
MOBILITY IN SOIL:	Not applicable.
OTHER ADVERSE EFFECTS:	The alkalinity of this material will have a local effect on ecosystems sensitive to changes in 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	Regulated
DOT	Regulated
IATA	Regulated
IMDG	Regulated
UN NUMBER:	UN3253
PROPER SHIPPING NAME:	DISODIUM TRIOXOSILICATE
CLASS:	8
PACKING GROUP:	III
IMDG HAZARDS:	Not a marine pollutant
BULK TRANSPORT:	Not regulated
SPECIAL PRECAUTIONS:	None

SECTION 15: REGULATORY INFORMATION

DSL:	Listed
WHMIS CLASS:	E
TSCA:	Listed

SECTION 16: OTHER INFORMATION

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