SOLUTIONS SAFETY DATA SHEET

SECTION 1: IDENTIFICATION

Product Name: GLENGARRY CS-1000

Product Use: Aluminium Corrosion Inhibitor Supplement

| Supplier: | Glengarry Solutions | Phone: | 416-737-1183 |
|-----------|-------------------------------|------------------------|----------------|
| Address: | 33 Melford Drive, Unit 6, | Fax: | 416-737-9793 |
| | Scarborough, Ontario. M1B 2G6 | POISON CONTROL CENTRE: | 1-800-268-9017 |

SECTION 2: HAZARD IDENTIFICATION

GHS Classification:

| Category 1: | Serious eye damage/eye irritation. |
|--------------|---|
| Category 1: | Corrosive to metals. |
| Category 1B: | Skin corrosion/irritation. |
| Category 3: | Specific target organ toxcity (respiratory System). |
| Category 5: | Acute toxicity, oral. |

Signal Word:

WARNING



Hazard Statements:

- H290: May be corrosive to metals.
- H303: May be harmful if swallowed.
- H315: Causes skin irritation.
- H319: Causes serious eye irritation.
- H335: May cause respiratory irritation.
- H373: May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements:

- P202: Do not handle until all safety precautions have been read and understood.
- P234: Keep only in original container.
- P260: Do not breathe mist.
- P264: Wash horoughly after handling.
- P280: Wear protective gloves/protective clothing/face protection.

Response Statements:

| P301+P330+P331 | IF SWALLOWED: Rinse mouth. DO NOT INDUCE VOMITING. |
|--------------------|---|
| P303+P361+P353 | IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water. |
| P304+P340+P310 | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. |
| P305+P351+P338+P31 | 0 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P332+313 | If skin irritation occurs: Get medical advice/attention. |
| P337+313 | If eye irritation persists: Get medical advice/attention. |
| P314: | Get medical advice/attention if you feel unwell. |
| P363: | Wash contaminated clothing before reuse. |
| Storage: P405: | Store locked up. |

Glengarry CS-1000

| SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS | | | | | | |
|--|-----------|--|---------|--|--|--|
| COMPONENTS CAS NO. EC No. CONCENTRATION (wt/wt) | | | | | | |
| Sodium silicate | 1344-09-8 | | 1 to 10 | | | |

| | SECTION 4 : FIRST AID MEASURES |
|------------|---|
| EYES: | Wash with copious amounts of water for at least 20 minutes keeping eyelids open. If irritation persists repeat flushing. Get immediate medical attention. |
| SKIN: | Immediately wash the affected areas with plenty of water. If irritation persists, obtain medical attention. |
| NHALATION: | Remove person to fresh air and keep comfortable for breathing. Seek medical attention immediately. |
| NOFOTION | |

INGESTION: Do not attempt to give anything by mouth to an unconscious person. If person is alert and not convulsing rinse mouth out and give 1-2 glasses of water to dilute material and seek medical attention immediately. DO NOT INDUCE VOMITING.

Most important symptoms and effects, both acute and delayed

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause redness and pain.

Indication of any immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation.

General Information

IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the materials involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

SECTION 5 : FIRE FIGHTING MEASURES

Flammability: Not flammable.

Suitable Extinguishing Media: Use extinguishing media suitable for surrounding materials.

Specific Hazards Arising from the Chemical: None known.

Special Protective Equipment and Precautions for Fire-fighters:

Self contained breathing apparatus and protective clothing should be worn in fighting all fires involving chemicals.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Use personal protective equipment. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid contact with skin, eyes and inhalation of vapors.

Environmental Precautions:

Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system.

Methods and Materials for Containment and Cleaning Up:

Spillage may be slippery use caution. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Dispose of according to local, provincial and federal regulations.

SECTION 7 : HANDLING AND STORAGE

Precautions for Safe Handling:

Do not handle until all safety precautions have been read and understood. Use normal good industrial hygiene and safety practices. Avoid contact with eyes, skin, and clothing. Avoid generation of mist. Use recommended safety equipment when handling. Wash thoroughly after handling.

Conditions for Safe Storage:

Avoid storage at high temperatures and protect from freezing. Store away from incompatibles. Keep containers closed when not in use. Store locked up.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

| COMPONENTS | CAS NO. | ACGIH TLV | OSHA PEL | NIOSH |
|-----------------|-----------|---------------|---------------|---------------|
| Sodium silicate | 1344-09-8 | Not Available | Not Available | Not Available |
| | | | | |

Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH IDLH: The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health

Appropriate Engineering Controls:

Ensure adequate ventilation, especially in confined areas.

Individual Protection Measures:

Eyes: Chemical safety goggles/Faceshield.

Skin: Chemical resistant gloves and appropriate protective clothing.

Respiratory: Approved NIOSH respiratory protection if TLV/PEL is exceeded or if over exposure is likely.

Work Hygienic Practices: Facilities storing or using this material should be equipped with emergency eyewash, and a safety shower. Good personal hygiene practices should always be followed.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

| Physical State: | Liquid. |
|--|---------------------------|
| Colour: | Clear to hazy white. |
| Odour : | Odourless. |
| Odour Threshold: | No information available. |
| pH: | 11.5 - 12.5 |
| Specific Gravity (water = 1) : | 1.10 - 1.15 |
| Melting point/Freezing point: | ~0 °C |
| Boiling point: | ~100°C |
| Flammability: | Not flammable. |
| Upper Explosive Limit: | Not Applicable. |
| Lower Explosive Limit: | Not Applicable. |
| Flash Point: | Not Applicable. |
| Auto-ignition Temperature: | Not Applicable. |
| Decomposition Temperature: | No information available. |
| Viscosity: | No information available. |
| Vapour Pressure (mm Hg) : | No information available. |
| Vapour Density (air = 1) : | No information available. |
| Evaporation Rate : | No information available. |
| Solubility in Water : | Miscible. |
| Partition Coefficient n-Octanol/Water: | No information available. |
| | |

SECTION 10: STABILITY AND REACTIVITY

| Reactivity: | Not reactive under normal conditions. | | |
|---|--|--|--|
| Chemical Stability: | Material is stable under normal conditions. | | |
| Possibility of Hazardous Reac | tions: Hazardous polymerization does not occur. | | |
| Conditions to Avoid: | Contact with incompatible materials. | | |
| Incompatible Materials: | Strong alkali may react violently with strong mineral acids, and may produce hydrogen in contact with zinc, aluminium, tin and their alloys. | | |
| Hazardous Decomposition Products: None known. | | | |

SECTION 11 : TOXICOLOGICAL INFORMATION

| Primary Route of Exposure: | Eye contact, skin contact, ingestion and inhalation. |
|--|---|
| Skin Corrosion/Irritation: | Irritating to skin. |
| Serious eye damage/irritation: | Irritating to eyes. |
| Respiratory or skin sensitization: Germ cell mutagenicity: | Not sensitising. No evidence of genotoxicity. In vitro/in vivo negative. |

Carcinogenicity:

Reproductive toxicity: STOT-single exposure: STOT-repeated exposure:

Aspiration hazard:

| No structural alerts. IARC, NTP, OSHA, ACGIH do not list this product as known or |
|---|
| suspected carcinogen. |
| No evidence of reproductive toxicity or developmental toxicity. |
| Not classified. |
| Not classified. |
| No information available. |

Component Acute Toxicity Information

| COMPONENT | CAS No. | ORAL LD ₅₀ | DERMAL LD ₅₀ | INHALATION LC ₅₀ |
|-----------------|-----------|-----------------------|-------------------------|-----------------------------|
| Sodium silicate | 1344-09-8 | 1960 mg/Kg (rat) | 4640 mg/Kg (rabbit) | Not available |

| SECTION 12 : ECOLOGICAL INFORMATION | | | | | | |
|--|--|---------------|--|--|--|--|
| COMPONENT | COMPONENT CAS No. Freshwater Algae Freshwater Fish Water Flea | | | | | |
| Sodium silicate | 1344-09-8 | Not Available | LC ₅₀ : 1108 mg/L, 96h (Brachydanio rerio) | EC ₅₀ : 1700 mg/L (48 hours) (Daphnia magna) | | |
| Toxicity: Persistence and degradability: Bioaccumulative potential: Mobility in soil: Other adverse effects: | No information available. No information available. Inorganic. Substance has no potential for bioaccumulation. No information available. Alkalinity in material will have local effect on ecosystems sensitive to changes in pH. | | | | | |
| SECTION 13 : DISPOSAL CONSIDERATIONS | | | | | | |
| Waste Disposal of substance: Container disposal: | Dispose of in accordance with national, state/provincial and regional regulations. Dispose of in accordance with national, state/provincial and regional regulations. | | | | | |
| SECTION 44 · TRANSPORT INFORMATION | | | | | | |

SECTION 14 : TRANSPORT INFORMATION

T.D.G./D.O.T. Classification:

Shipping Name:NOT REGULATEDUN Number:Not Applicable.Class: Not Applicable.

Packing Group:

11-Aug-2017

Not Applicable.

SECTION 15: REGULATORY INFORMATION

WHMIS Classification:



Class D2: Material Causing Other Toxic Effects

Class E: Corrosive

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulation (HPR), Hazard Communication Rule (2012), Regulation (EC) No 1907/2006

SECTION 16: OTHER INFORMATION

Preparation Information:

| Latest Revision D | ate: | 11-Aug-2017 | Issue Date: |
|-------------------|------|---------------------------|---------------------------------|
| Version No. | 1.0 | | |
| Povision Notos: | - | This document has been up | dated to comply with the Global |

Revision Notes: This document has been updated to comply with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

Prepared By: Regulatory Affairs.

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