

# MATERIAL SAFETY DATA SHEET

**Eco Solutions**  
1114 Lower Base Line  
Milton, Ontario  
L0P 1E0

**In Case of Emergency, Call**

**1 800 326-7658**

**Date of MSDS Preparation (mm/dd/yyyy)**

10/11/2011

**Superceded date (mm/dd/yyyy)**

8/13/2009

**MSDS Prepared By:**

T Vaccari

**For further information contact:**

905 864-8740

## Section 1 : Product Identification

**Product Identifier:** FUSION 2350  
**Registration No.:** Not Applicable  
**Chemical Class:** Salt solution  
**Synonym:**

**Active Ingredient (%)** ~12% Sodium Chloride  
~50% Degraded Sugar Beet

**CAS NO.:** 7647-14-5  
NA

**Chemical Name:**  
**Product Use:**

Road De-icer

## Section 2 : Composition/Information on Ingredients

Material	OSHA PEL	ACGIH TLV	Other	NTP/IARC/OSHA Carcinogen	WHMIS
Sodium Chloride	None	None		No	NA
Water	None	None		No	NA
Degraded Sugar Beet	None	None		No	NA

## Section 3 : Hazards Identification

**Symptoms of Acute Exposure:** Generally not hazardous in normal circumstances. However, good practices should always be followed. Avoid excessive exposure to skin and eyes.

**Hazardous Decomposition Products:** None Known

**Physical Properties:** Light amber, liquid with coffee odour.

**Unusual Fire, Explosion, & Reactivity Hazards:** None

**Potential Health Effects:** May cause mild irritation of the eyes with prolonged exposure. May cause irritation to exposed skin. May cause irritation to the respiratory tract.

## Section 4 : First Aid Measures

**Eye Contact:** Wash eyes with plenty of water for 15 minutes, lifting eyelids occasionally. Seek medical assistance if irritation develops and persists.

**Skin Contact:** Wash exposed area with soap and water. If any irritation persists, seek medical attention.

**Inhalation:** Remove to fresh air.

**Ingestion:** Give 3-4 glasses of water. If vomiting occurs, give fluids again. Get medical attention as evacuation of the stomach may be required.

**Note to Physician:**

**Medical Conditions Known To Be Aggravated:** Sodium chloride can aggravate cardiovascular conditions

## Section 5 : Fire Fighting Measures

**Flash point & method:** NA

**Upper & lower flammable (explosive) limits in air:** NA

**Auto ignition temperature:** NA

**Hazardous combustion products:** None

**Conditions under which flammability could occur:** None

**Extinguishing media:** This product does not burn until water content has evaporated. Use extinguishing media most appropriate for the surrounding fire.

**Sensitivity to explosion by mechanical impact:** None

**Sensitivity to explosion by static discharge:** None

## Section 6 : Accidental Release Measures

### Personal Precautions:

Avoid exposure to eyes and skin. Wear safety glasses or chemical goggles depending on risk of splashing the product into the eyes. Avoid skin exposure with gloves and clean body-covering clothing. Where there is a likelihood of product mist, the use of a NIOSH approved respirator is recommended.

### Procedures for dealing with release or spill:

Wear appropriate protective equipment. Mop up or wet-vac any spill for use as ice-melt. Dispose of any waste as required by local by-laws and Provincial Regulations.

## Section 7: Handling & Storage

### Handling Practices:

Avoid unnecessary exposures, especially to the eyes. Wear eye protection and wash exposed skin after handling the product. General ventilation is usually adequate for the handling of this product.

### Appropriate storage practices/requirements:

Store product in closed containers. Do not allow to freeze. Frozen product will expand and may cause damage to containers and/or pipe lines. Do not store with strong acids or bases.

### National Fire Code classification:

NONE

## Section 8 : Exposure Control/Personal Protection

### Applicable control measures, including engineering controls:

Generally, this is not hazardous material. Good hygiene practices, general ventilation and appropriate eye protection is adequate for most handling situations.

### Personal protective equipment for each exposure route:

#### General:

**Ingestion:** Use a face shield if pressurized splashes to the face are possible.

**Eyes:** Glasses with sideshields or chemical goggles as appropriate to the handling circumstances.

**Skin:** Rubber or neoprene gloves and clean body-covering clothing.

**Inhalation:** None normally required. If mist possible, a NIOSH approved respirator should be worn.

## Section 9 : Physical & Chemical Properties

<b>Appearance:</b>	Dark amber liquid	<b>Vapour Density:</b>	NA
<b>Formulation Type:</b>	Salt solution	<b>Boiling point:</b>	~ 100° C
<b>Odour:</b>	Coffee odour	<b>Melting point:</b>	
<b>pH:</b>	8 - 8.4	<b>Freezing Point:</b>	- 27° C
<b>Vapour pressure and reference temp.:</b>	NA	<b>Specific gravity or density:</b>	~1.23 - 1.26
<b>Evaporation Rate:</b>	1 (Water=1)	<b>Viscosity:</b>	~34 centipoise @ 0° C
<b>Odour threshold:</b>	None	<b>Solubility in Water:</b>	soluble

## Section 10 : Stability & Reactivity

<b>Chemical stability:</b>	STABLE
<b>Conditions to avoid:</b>	None Known
<b>Incompatibility with other materials:</b>	Avoid strong acids or bases.
<b>Hazardous decomposition products:</b>	None Known
<b>Hazardous polymerization:</b>	Can occur with the addition of strong acids or bases generating extreme heat.

## Section 11 : Toxicological Information

### Acute toxicity/Irritation Studies (Finished Product )

<b>Ingestion:</b>	Not considered to be very toxic. Most toxic component of this product is sodium chloride (approximately 12%). See toxicity below. Large doses of sodium chloride could cause vomiting, diarrhea and prostration. Inflammatory reactions within the digestive tract are also possible.  Sodium Chloride    LD <sub>50</sub> (mouse)    4 gm/kg    LD <sub>50</sub> (rat)    3 gm/kg
<b>Dermal:</b>	Absorption can occur with similar effects as with ingestion.
<b>Inhalation:</b>	May cause mild irritation of the respiratory tract.
<b>Eye Contact:</b>	May cause mild irritation.
<b>Skin Contact:</b>	May cause mild irritation in damaged skin.
<b>Skin Sensitization:</b>	None
<b>Reproductive/Development Effects:</b>	None of the ingredients of this product have been reported to cause birth defects.
<b>Carcinogenicity:</b>	Not listed by IARC, NTP, OSHA, NIOSH or California
<b>Other Toxicity Information:</b>	
<b>Target Organs:</b>	Cariovascular system, gastrintestinal tract, eyes and skin. Exposures could aggravate existing cardiovascular conditions.

## Section 12 : Ecological Information

### **Summary of Effects:**

There is no specific information available. Release of the product into the environment other than for approved uses should be avoided. Large quantities could be hazardous to vegetation and aquatic life.

### **Eco-Acute Toxicity:**

No specific information

### **Eco-Chronic Toxicity:**

No specific information

**Enviromental Fate:**

No specific information

**Section 13 : Disposal Considerations**

**Waste Disposal Information:**

Spilled material should be collected whenever possible for use as an ice-melt. When this is not practical, absorb the material and shovel into containers. Label and dispose of the collected material according to Provincial Regulations.

**Section 14 : Transport information**

**Shipping information such as shipping classification:**

This product is not regulated for shipping in North America.

**Proper Shipping Name:**

NONE

**Section 15 : Regulatory Information**

**WHMIS Classification for product:**

This product is not a controlled material.

**Canadian DSL**

The ingredients in this product are on the Domestic Substance List.

**Section 16 : Other Information**