



Material Safety Data Sheet

NR00899
Post & Pole Fumigant

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Id: NR00899

Product Name: Post & Pole Fumigant

Synonyms: None

Chemical Family: Sodium methylthiocarbamate solution

Application: Agricultural fumigant.

Distributed By:

Univar Canada Ltd.
9800 Van Horne Way
Richmond, BC
V6X 1W5

Prepared By: The Safety, Health and Environment Department of Univar Canada Ltd.

Preparation date of MSDS: 23 February 2011

Telephone number of preparer: 1-866-686-4827

24-Hour Emergency Telephone Number (CANUTEC): (613) 996-6666

2. COMPOSITION/INFORMATION ON INGREDIENTS

| Ingredients | Percentage (W/W) | LD50s and LC50s Route & Species: |
|--|------------------|--|
| Other inert ingredients Not Available | 67.2 | Not available. |
| Metam-sodium 137-42-8 | 32.7 | Oral LD50 (Rat) = 450 mg/kg Dermal LD50 (Rat) = 636 mg/kg Dermal LD50 (Rabbit) = 800 mg/kg Inhalation LC50 (Rat) > 6.8 mg/L 4 h |

Note: Registration number under the Canadian Pest Control Products Act : 19343

3. HAZARDS IDENTIFICATION

Potential Acute Health Effects:

Eye Contact: Causes moderate eye irritation.

Skin Contact: Harmful if absorbed through the skin. Corrosive. May cause an allergic skin reaction.

Inhalation: Harmful if inhaled. Causes irritation of the mouth, nose and throat. Causes irritation of the respiratory tract, experienced as nasal discomfort and discharge, with chest pain and coughing. Irritates mucous membranes. Headache, nausea, vomiting, dizziness, drowsiness and loss of consciousness may occur.

Ingestion: Ingestion of this product would cause headache, dizziness, fatigue and central nervous system depression. Causes vomiting, nausea, and diarrhea. Harmful if swallowed.

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4. FIRST AID MEASURES

Eye Contact: In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing. Hold eyelids open during flushing.

Skin Contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes. Get medical attention. Remove contaminated clothing and laundry before reuse. If irritation persists or signs of toxicity occur, seek medical attention.

Inhalation: Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get immediate medical attention.

Ingestion: Do not induce vomiting. Slowly dilute with 1-2 glasses of water and seek medical attention. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs.

Notes to Physician: Treat symptomatically. Contact a poison control centre for additional treatment information.

5. FIRE FIGHTING MEASURES

Flash Point: >93.3 °C / >200 °F

Flash Point Method: Tag Closed Cup

Autoignition Temperature: Not available.

Flammable Limits in Air (%): Not Available.

Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Special Exposure Hazards: This product is not flammable. However, this product may support combustion under fire conditions and will generate toxic fumes under fire conditions. NOTE: Dilution with water may cause generation of flammable and toxic fumes of MTC and Hydrogen Sulfide.

Hazardous Decomposition/Combustion Materials (under fire conditions): Hydrogen sulphide. Oxides of nitrogen. Methyl Isothiocyanate (MITC)

Special Protective Equipment: Fire fighters should wear full protective clothing, including self-contained breathing equipment.

NFPA RATINGS FOR THIS PRODUCT ARE: Not Available.

HMIS RATINGS FOR THIS PRODUCT ARE: Not Available.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures: Restrict access to unprotected personnel. Wear appropriate protective equipment.

Environmental Precautionary Measures: Prevent entry into sewers or streams, dike if needed. Do not contaminate surface water.

Procedure for Clean Up: Try to work upwind of spill. Cover with absorbent (clay, sawdust, straw, kitty litter etc.), to absorb the liquid. Sweep into an open drum. Clean the area with common powdered household detergent and a stiff brush and just enough water to make a slurry. Absorb and sweep into the same open drum. Rinse with water, absorb and add to the waste drum. Close the drum and dispose of properly.

7. HANDLING AND STORAGE

Handling: Avoid contact with eyes, skin and clothing. Avoid breathing vapor. Use appropriate personnel protective equipment. Wash hands, arms and face thoroughly with soap and water after handling and before eating or smoking. Routinely shower or bathe after work and wash all clothing with soap and hot water before reusing. In case of contact, immediately remove contaminated clothing and wash thoroughly with soap and water. Do not transport or store Guardsman Post & Pole Fumigant with any food or feed intended for human or animal consumption. Keep container tightly closed when not in use. Keep children and pets away from treated poles.

Storage: Do not contaminate water, food or feed by storage or disposal. Store in a cool, dry, well ventilated area. Do not store below 0 °F. Product crystallizes at lower temperatures.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:

Use in a well ventilated area. Use of mechanical or local exhaust systems is recommended.

Respiratory Protection: When using product in enclosed areas, use a NIOSH/MSHA approved pesticide respirator.

Gloves:

Rubber gloves.

Skin Protection: Impervious clothing. Apron, coveralls and/or other resistant protective clothing. Launder contaminated clothing before reuse.

Eyes: Chemical goggles; also wear a face shield if splashing hazard exists.

Other Personal Protection Data: Long sleeves. Wear clean, body-covering clothing. Chemical resistant footwear. Ensure that eyewash stations and safety showers are proximal to the work-station location.

| Ingredients | Exposure Limit - ACGIH | Exposure Limit - OSHA | Immediately Dangerous to Life or Health - IDLH |
|-------------------------|------------------------|-----------------------|--|
| Other inert ingredients | Not available. | Not available. | Not Available. |
| Metam-sodium | Not available. | Not available. | Not Available. |

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid.

Colour: Orange Light Yellow-green

Odour: Essentially odourless to fairly strong odor of amine or sulfur.

pH 9 - 10.5

Specific Gravity: 1.158

Boiling Point: 110°C /230°F

Freezing/Melting Point: -17°C / 1°F

Vapour Pressure: Not Available.

Vapour Density: Not Available.

% Volatile by Volume: 67%

Evaporation Rate: Not Available.

Solubility: Not Available.

VOCs: Not Available.

Viscosity: Not Available.

Molecular Weight: Not Available.

Other: Not Available.

10. STABILITY AND REACTIVITY

Chemical Stability: Stable.

Hazardous Polymerization: Will not occur.

Conditions to Avoid: Metam Sodium decomposes, when diluted with water, to methyl isothiocyanate (MITC, a lachrymator and moderate poison) and/or to hydrogen sulfide (a highly poisonous gas). It can also decompose to carbon disulfide and monomethylamine (both highly flammable) if contacted with strong acid. Use the solution promptly after mixing. Do not allow the sodium to stand. As originally packaged, it is stable under normal conditions for up to 2 years.

Materials to Avoid: Additional water and strong aqueous acids. Corrosive to copper, brass, and zinc and may soften and or discolour iron.

Hazardous Decomposition Products: Toxic fumes. Methyl isothiocyanate (MITC). Hydrogen sulfide. Oxides of nitrogen.

Additional Information:

If treated with strong acids, fumes of carbon disulfide and monomethylamine will be given off.

11. TOXICOLOGICAL INFORMATION

Principle Routes of Exposure

Ingestion: Ingestion of this product would cause headache, dizziness, fatigue and central nervous system depression.

Causes vomiting, nausea, and diarrhea. Harmful if swallowed.

Skin Contact: Harmful if absorbed through the skin. Corrosive. May cause an allergic skin reaction.

Inhalation: Harmful if inhaled. Causes irritation of the mouth, nose and throat. Causes irritation of the respiratory tract, experienced as nasal discomfort and discharge, with chest pain and coughing. Irritates mucous membranes. Headache, nausea, vomiting, dizziness, drowsiness and loss of consciousness may occur.

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11. TOXICOLOGICAL INFORMATION

Eye Contact: Causes moderate eye irritation.

Additional Information: As a result of use of the product, applicators and other persons present in the area of the application can be exposed to MITC and/or hydrogen sulfide. These chemicals can be evolved as gases from the soil of an application. MITC has a horseradish like odor and can be very irritating to the eyes. Hydrogen sulfide has a rotten egg odor and can be very offensive. The nose becomes deadened to a hydrogen sulfide odor, so not being able to detect the odor any longer does not mean the exposure has ended. Over exposure to MITC may result in strong skin and eye irritation, running nose, dizziness, cramps, nausea, vomiting and mild to severe irritation to the mucous membranes. In addition, laboratory studies have shown that exposure to the active ingredient, followed by ingestion of alcohol, may cause an adverse reaction, including low blood pressure, rapid heart beat, and flushing of the skin. Consumption of alcohol during and after exposure to this product should be avoided.

Acute Test of Product:

Acute Oral LD50: Not Available.

Acute Dermal LD50: Not Available.

Acute Inhalation LC50: Not Available.

Carcinogenicity:

| Ingredients | IARC - Carcinogens | ACGIH - Carcinogens |
|-------------------------|--------------------|---------------------|
| Other inert ingredients | Not listed. | Not listed. |
| Metam-sodium | Not listed. | Not listed. |

Carcinogenicity Comment: Laboratory studies on a related Metam sodium product have shown some carcinogenic effect in laboratory animals.

Reproductive Toxicity/ Teratogenicity/ Embryotoxicity/ Mutagenicity: Laboratory studies on a related Metal sodium product have shown some development effect in laboratory animals. Laboratory studies on a related Metam sodium product have shown some evidence of mutagenicity in vitro but no conclusive evidence in vivo.

12. ECOLOGICAL INFORMATION

Ecotoxicological Information:

| Ingredients | Ecotoxicity - Fish Species Data | Acute Crustaceans Toxicity: | Ecotoxicity - Freshwater Algae Data |
|-------------------------|--|-----------------------------|-------------------------------------|
| Other inert ingredients | Not Available. | Not Available. | Not Available. |
| Metam-sodium | LC50 96 h (Lepomis macrochirus) 0.175 - 0.82 mg/L static | Not Available. | Not Available. |

Other Information:

This material is expected to be toxic to aquatic life.

13. DISPOSAL CONSIDERATIONS

Disposal of Waste Method: Disposal of all wastes must be done in accordance with municipal, provincial and federal regulations.

Contaminated Packaging: Empty containers should be recycled or disposed of through an approved waste management facility.

14. TRANSPORT INFORMATION

DOT (U.S.):

DOT Shipping Name: CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (METAM SODIUM)

DOT Hazardous Class 8

DOT UN Number: UN3266

DOT Packing Group: III

DOT Reportable Quantity (lbs): Not Available.

Note: No additional remark.

14. TRANSPORT INFORMATION

Marine Pollutant: Yes.

TDG (Canada):

TDG Shipping Name: CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (METAM SODIUM)

Hazard Class: 8

UN Number: UN3266

Packing Group: III

Note: No additional remark.

Marine Pollutant: Yes.

15. REGULATORY INFORMATION

U.S. TSCA Inventory Status: All components of this product are either on the Toxic Substances Control Act (TSCA) Inventory List or exempt.

Canadian DSL Inventory Status: All components of this product are either on the Domestic Substances List (DSL), the Non-Domestic Substances List (NDSL) or exempt.

Note: Not available.

U.S. Regulatory Rules

| Ingredients | CERCLA/SARA - Section 302: | SARA (311, 312) Hazard Class: | CERCLA/SARA - Section 313: |
|-------------------------|----------------------------|-------------------------------|----------------------------|
| Other inert ingredients | Not Listed. | Not Listed. | Not Listed. |
| Metam-sodium | Not Listed. | Not Listed. | Listed |

California Proposition 65: Listed.

MA Right to Know List: Not Listed.

New Jersey Right-to-Know List: Listed.

Pennsylvania Right to Know List: Not Listed.

WHMIS Hazardous Class:

WHMIS EXEMPT.

Pest Control Products Act Registration No.19343

16. OTHER INFORMATION

Additional Information:

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

Disclaimer:

NOTICE TO READER:

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Do not use ingredient information and/or ingredient percentages in this MSDS as a product specification. For product specification information refer to a Product Specification Sheet and/or a Certificate of Analysis. These can be obtained from your local Univar Sales Office.

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*****END OF MSDS*****