

POLLARD HIGHWAY PRODUCTS

Material Safety Data Sheet

ICE BITE S

PRODUCT IDENTIFICATION

PRODUCT NAME: ICE BITE S

MSDS NUMBER:

DATE ISSUED: 01-01-2012

SUPERCEDES:

ISSUED BY: Pollard Highway Products
Harrow, Ontario
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Prepared to U.S. OSHA, CMA, ANSI and Canadian WHMIS Standards
VFLO

PART I What is the material and what do I need to know in an emergency?

1. PRODUCT IDENTIFICATION

TRADE NAME (AS LABELED): ICE BITE S
CHEMICAL NAME/CLASS: Inorganic Chloride Solution & Organic Performance Enhancer
TECHNICAL BULLETINS,: Organic Deicing Solution
PRODUCT USE: Various Industrial Applications
SUPPLIER/MANUFACTURER'S NAME: Pollard Highway Products
ADDRESS: Box 280
Harrow, Ontario N0R 1G0
EMERGENCY PHONE: CHEMTREC: 1-800-265-5619
BUSINESS PHONE: 1-519-738-2213
MSDS PREPARATION DATE: November 22, 2007

2. COMPOSITION and INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS # % w/w	ACGIH		OSHA			
		TLV	STEL	PEL	STEL	IDLH	OTHER
		Mg/M3	mg/m3	mg/m3	mg/m3	mg/m3	
Sodium Chloride	7647-14-5	NE	NE	NE	NE	NE	NE
Ice Bite S	68476-78-8	NE	NE	NE	NE	NE	NE

NE = Not Established C = Ceiling Limit See Section 16 for Definitions of Terms Used

NOTE: ALL WHMIS required information is included in appropriate sections based on the ANSI Z400.1-1993 format.

3. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW: This product is a brown to black, with a slight sweet odor. The primary health hazard associated with this product is the potential for slight irritation of eyes, skin, and other contaminated tissue. This product is not flammable or reactive. Emergency responders must wear the personal protective equipment suitable for the situation to which they are responding.

SYMPTOMS OF OVEREXPOSURE BY ROUTE OF EXPOSURE: The primary routes of overexposure for the solution are via inhalation and contact with skin and eyes. The following paragraphs describe the symptoms of overexposure to this material.

INHALATION: If vapors, mists, or sprays of this product are inhaled, they HEALTH (BLUE) 1 may slightly irritate the nose, throat, and lungs. Symptoms may include the following: sneezing, coughing, and difficulty breathing. These symptoms generally are alleviated when the overexposure ends.

CONTACT WITH SKIN or EYES: Depending on the duration of overexposure, contact with the eyes will cause slight irritation, pain, and reddening. Depending on the duration of skin contact, skin overexposures may cause reddening, discomfort, and slight irritation.

SKIN ABSORPTION: Skin absorption is not a significant route of Overexposure.

INGESTION: If this product is swallowed, slight irritation of the mouth, throat, esophagus, and other tissues of the digestive system will occur immediately upon contact. Symptoms of such overexposure can include nausea, abdominal pain, vomiting, and diarrhea. Severe ingestion exposures may result in kidney damage.

INJECTION: Accidental injection of this product, via laceration or puncture by a contaminated object may cause pain and slight irritation in addition to the wound.

HEALTH EFFECTS OR RISKS FROM EXPOSURE: An Explanation in For routine industrial applications Lay Terms. In the event of overexposure, the following symptoms may be See Section 16 for Definition of Ratings observed:

ACUTE: The primary hazard associated with this product is the potential for slight irritation of skin, eyes, and other contaminated tissue.

CHRONIC: No chronic effects are currently reported for prolonged or repeated exposures to this product. See Section 11 (Toxicology Information) for additional data.

TARGET ORGANS: Skin, eyes (occupational exposures). Kidneys (ingestion).

HAZARDOUS MATERIAL INFORMATION SYSTEM

HEALTH (BLUE)	1
FLAMMABILITY (RED)	0
REACTIVITY (YELLOW)	0
PROTECTIVE EQUIPMENT	C

PART II What should I do if a hazardous situation occurs?

4. FIRST-AID MEASURES

SKIN EXPOSURE: If this product contaminates the skin, begin decontamination with running water. The minimum flushing is for 15 minutes if the overexposure results in slight irritation. Remove exposed or contaminated clothing, taking care not to contaminate eyes. Victim must seek immediate medical attention if any adverse effect occurs.

EYE EXPOSURE: If this product's liquid or vapors enter the eyes, open contaminated individual's eyes while under gently running water. Use sufficient force to open eyelids. Have contaminated individual "roll" eyes. Minimum flushing is for 15 minutes. Contaminated individual must seek immediate medical attention.

INHALATION: If vapors, mists, or sprays of this product are inhaled, remove contaminated individual to fresh air. If necessary, use artificial respiration to support vital functions. Remove or cover gross contamination to avoid exposure to rescuers.

INGESTION: If this product is swallowed, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. If professional advice is not available, do not induce vomiting. Contaminated individual should drink milk, egg whites, or large quantities of water. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or unable to swallow. Contaminated individuals must be taken for medical attention if any adverse reaction occurs. Rescuers should be taken for medical attention, if necessary. Take a copy of label and MSDS to health professional with contaminated individual.

5. FIRE-FIGHTING MEASURES

NFPA RATING	
FLAMMABILITY	
0	
HEALTH 1	0 REACTIVITY
-	
OTHER	

FLASH POINT: Not flammable.

AUTOIGNITION TEMPERATURE: Not flammable.

FLAMMABLE LIMITS (in air by volume, %): Lower (LEL): Not applicable.
Upper (UEL): Not applicable.

FIRE EXTINGUISHING MATERIALS:

Water Spray: YES Carbon Dioxide: YES
Foam: YES Dry Chemical: YES
Halon: YES Other: Any "ABC" Class.

UNUSUAL FIRE AND EXPLOSION HAZARDS: When involved in a fire, this material may decompose and produce acrid vapors, magnesium compounds, and chloride compounds.

Explosion Sensitivity to Mechanical Impact: Not sensitive.

Explosion Sensitivity to Static Discharge: Not sensitive.

SPECIAL FIRE-FIGHTING PROCEDURES: Incipient fire responders should wear eye protection. Structural fire fighters must wear Self-Contained Breathing Apparatus and full protective equipment. Chemical resistant clothing may be

necessary. Move containers from fire area if they have not been exposed to heat and if it can be done without risk to personnel. If this product is involved in a fire, fire run-off water should be contained to prevent possible environmental damage.

6. ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK RESPONSE: Uncontrolled releases should be responded to by trained personnel using pre-planned procedures. Proper protective equipment should be used. In case of a large spill, clear the affected area, and protect people. In the event of a non-incidental release (e.g., 55-gallon release in which excessive splashes or sprays can be generated), minimum Personal Protective Equipment should be Level C: triple-gloves (rubber gloves and nitrile gloves, over latex gloves), chemically resistant suit and boots, hard-hat, and an air-purifying respirator with a high-efficiency particulate filter. Level B, which include Self Contained Breathing Apparatus, must be worn in situations in which the oxygen level is less than 19.5% or unknown. Absorb spilled liquid with polypads or other suitable absorbent materials. Decontaminate the area thoroughly. Place all spill residue in a suitable container and seal. Dispose of in accordance with Canadian Federal, Provincial, and local waste disposal regulations (see Section 13, Disposal Considerations).

PART III How can I prevent hazardous situations from occurring?

7. HANDLING and STORAGE

WORK PRACTICES AND HYGIENE PRACTICES: As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash hands after handling this product. Do not eat, drink, smoke or apply cosmetics while handling this product. All work practices should minimize the generation of splashes and aerosols. Remove contaminated clothing immediately.

STORAGE AND HANDLING PRACTICES: All employees who handle this material should be trained to handle it safely. Avoid breathing vapors or mists generated by this product. Use in a well-ventilated location. Open containers slowly, on a stable surface. Containers of this product must be properly labeled. Empty containers may contain residual liquid or vapors therefore, empty containers should be handled with care. Store containers in a cool, dry location, away from direct sunlight, sources of intense heat, or where freezing is possible. Store away from incompatible materials (see Section 10, Stability and Reactivity). Material should be stored in secondary containers, or in a diked area, as appropriate. Keep container tightly closed when not in use. Inspect all incoming containers before storage, to ensure containers are properly labeled and not damaged.

PROTECTIVE PRACTICES DURING MAINTENANCE OF CONTAMINATED EQUIPMENT: Follow practices indicated in Section 6 (Accidental Release Measures). Make certain that application equipment is locked and tagged-out safely, if necessary. Collect all rinsates and dispose of according to applicable Federal, Provincial, or local procedures.

8. EXPOSURE CONTROLS - PERSONAL PROTECTION

VENTILATION AND ENGINEERING CONTROLS: Exhaust directly to the outside. Use local exhaust ventilation, and process enclosure if necessary, to control mist formation. Supply sufficient replacement air to make up for air removed by system. Ensure eyewash/safety shower stations are available near areas where this product is used.

RESPIRATORY PROTECTION: Maintain airborne contaminant concentrations below exposure limits listed in Section 2 (Composition and Information on Ingredients). If respiratory protection is needed, use only protection authorized in 29 CFR 1910.134 or applicable U.S. State regulations (or the

appropriate standards of Canada and its Provinces). Use supplied air respiration protection during response procedures to non-incident releases and if oxygen levels are below 19.5% or are unknown.

EYE PROTECTION: Splash goggles or safety glasses.

HAND PROTECTION: Wear Neoprene or Rubber gloves for routine industrial use. Use triple gloves for spill response, as stated in Section 6 (Accidental Release Measures) of this MSDS.

BODY PROTECTION: Use body protection appropriate for task. An apron, or other impermeable body protection is suggested. Full-body chemical protective clothing is recommended for emergency response procedures.

9. PHYSICAL and CHEMICAL PROPERTIES

VAPOR DENSITY: Not applicable.
EVAPORATION RATE (n-BuAc=1): Similar to water.
SPECIFIC GRAVITY (@ 15 C (59 F): 1.20
FREEZING POINT or RANGE: -35 C (-30 F)
SOLUBILITY IN WATER: Completely
BOILING POINT: > 100 C (> 212 F)
VAPOR PRESSURE: Not applicable.
pH c 25 C (77 F): Approximately 7.0
ODOR THRESHOLD: Not applicable.
LOG WATER/OIL DISTRIBUTION COEFFICIENT: Not available.
APPEARANCE AND COLOR: This product is brown to black in color with a slight sweet odor.

HOW TO DETECT THIS SUBSTANCE (warning properties):
There are no distinguishing characteristics associated with this solution.

10. STABILITY and REACTIVITY

STABILITY:
Stable.

DECOMPOSITION PRODUCTS:
sodium compounds, chloride compounds, oxides of carbon.

MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE:
Strong oxidizing agents, strong acids.

HAZARDOUS POLYMERIZATION:
Will not occur.

CONDITIONS TO AVOID:
Extreme heat and contact with incompatible chemicals.

PART IV Is there any other useful information about this material?

11. TOXICOLOGICAL INFORMATION

TOXICITY DATA: Toxicology data are available for Magnesium Chloride, Hexahydrate, as follows: LD50 - Oral - rat: 8100 mg/kg LDLo - Intravenous - guinea pig: 250 mg/kg LDLo - Intravenous - rat: 176 mg/kg: convulsions or effect on seizure LDLo - Intraarterial - guinea pig: 250 mg/kg threshold; coma TDLo - Oral - mouse: 273 gm/kg/13 weeks (continuous); Kidney, Ureter, LD50 - Oral - mouse: 7600 mg/kg: somnolence, excitement Bladder - changes in tubules LD50 - Intraperitoneal - mouse: 775 mg/kg: somnolence, excitement Cytogenetic analysis - hamster Lung: 12 gm/L

SUSPECTED CANCER AGENT: The components of this product are not found on the following lists: FEDERAL OSHA Z LIST, NTP, IARC, and CAL/OSHA and therefore are not considered to be, nor suspected to be, cancer causing agents by these agencies.

IRRITANCY OF PRODUCT: This product is slightly irritating to contaminated tissue.

SENSITIZATION OF PRODUCT: This product contains no known sensitizers with repeated or prolonged use.

REPRODUCTIVE TOXICITY INFORMATION: Listed below is information concerning the effects of this product and its components on the human reproductive system.

Mutagenicity:

This product is not reported to produce mutagenic effects in humans.

Embryotoxicity:

This product is not reported to produce embryotoxic effects in humans.

Teratogenicity:

This product is not reported to cause teratogenic effects in humans.

Reproductive Toxicity:

This product is not reported to cause reproductive toxicity effects in humans. A mutagen is a chemical which causes permanent changes to genetic material (DNA) such that the changes will propagate through generational lines. An embryotoxin is a chemical which causes damage to a developing embryo (i.e. within the first eight weeks of pregnancy in humans), but the damage does not propagate across generational lines. A teratogen is a chemical which causes damage to a developing fetus, but the damage does not propagate across generational lines. A reproductive toxin is any substance which interferes in any way with the reproductive process.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Pre-existing dermatitis, or other skin disorders, may be aggravated by overexposure to this product.

RECOMMENDATIONS TO PHYSICIANS:

Treat symptoms and eliminate overexposure. Be observant for signs of pulmonary edema in the event of severe inhalation overexposures.

ACGIH BIOLOGICAL EXPOSURE INDICES:

Currently, there are no ACGIH Biological Exposure Indices (BEIs) associated with the components of this product.

12. ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

ENVIRONMENTAL STABILITY: The components of this product are relatively stable under ambient, environmental conditions.

EFFECT OF MATERIAL ON PLANTS or ANIMALS: This product may be harmful to terrestrial plant or animal life, especially if released in large quantities. Refer to Section 11 (Toxicology Information) for clinical data on the effects of this product's components on test animals.

EFFECT OF CHEMICAL ON AQUATIC LIFE: This product may be harmful to aquatic plant or animal life, especially if released in large quantities.

13. DISPOSAL CONSIDERATIONS

PREPARING WASTES FOR DISPOSAL: Waste disposal must be in accordance with appropriate U.S. Federal, State, and local regulations, or the applicable standards of Canada and its Provinces. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority.

EPA WASTE NUMBER: Not applicable to wastes consisting only of this product.

14. TRANSPORTATION INFORMATION

THIS MATERIAL IS NOT HAZARDOUS AS DEFINED BY 49 CFR 172.101 BY THE U.S. DEPARTMENT OF TRANSPORTATION.

PROPER SHIPPING NAME: Not Applicable

HAZARD CLASS NUMBER and DESCRIPTION: Not Applicable

UN IDENTIFICATION NUMBER: Not Applicable

PACKING GROUP: Not Applicable

DOT LABEL(S) REQUIRED: Not Applicable

NORTH AMERICAN EMERGENCY RESPONSE GUIDE NUMBER (1996): Not Applicable

MARINE POLLUTANT: This product does not contain any components which are designated by the Department of Transportation to be Marine Pollutants (per 49 CFR 172.101 Appendix B).

TRANSPORT CANADA TRANSPORTATION OF DANGEROUS GOODS REGULATIONS: THIS MATERIAL IS NOT CONSIDERED AS DANGEROUS GOODS.

15. REGULATORY INFORMATION

ADDITIONAL UNITED STATES REGULATIONS:

U.S. SARA REPORTING REQUIREMENTS:

This product is not subject to the reporting requirements of Sections 302, 304 and 313 of Title III of the Superfund Amendments and Reauthorization Act.

U.S. SARA THRESHOLD PLANNING QUANTITY: Not applicable.

U.S. CERCLA REPORTABLE QUANTITY (RQ): Not applicable.

U.S. TSCA INVENTORY STATUS: Magnesium Chloride Hexahydrate is a hydrate of an anhydrous form which is on the TSCA Inventory.

OTHER U.S. FEDERAL REGULATIONS: Not applicable.

U.S. STATE REGULATORY INFORMATION: The components of this product are not covered under the following specific State regulations:

Alaska - Designated Toxic and Hazardous Michigan -Critical Materials Register:
No. Pennsylvania - Hazardous Substance List: Substances: No. Minnesota -
List of Hazardous Substances: No.

California - Permissible Exposure Limits for No. Rhode Island - Hazardous
Substance List: Chemical Contaminants: No. Missouri - Employer Information/
Toxic No. Florida - Substance List: No. Substance List: No. Texas - Hazardous
Substance List: No. Illinois - Toxic Substance List: No.

New Jersey - Right to Know Hazardous West Virginia - Hazardous Substance List:
Kansas - Section 302/313 List: No. Substance List: No. No.

Massachusetts - Substance List: No. North Dakota - List of Hazardous
Chemicals, Wisconsin - Toxic and Hazardous Reportable Quantities: No.
Substances: No.

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): No component of this product is on the California Proposition 65 lists.

ANSI LABELING (per Z129.1, provided to summarize occupational safety hazards):
CAUTION! MAY CAUSE SKIN OR EYE IRRITATION. MAY BE HARMFUL IF SWALLOWED. Do not

taste or swallow. Do not get on skin or in eyes. Avoid breathing vapors or mists. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. Wear gloves, goggles and suitable body protection. FIRST-AID: In case of contact, immediately flush skin or eyes with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. If inhaled, remove to fresh air. If ingested, do not induce vomiting. Get medical attention. IN CASE OF FIRE: Use water fog, dry chemical, CO₂, or "alcohol" foam. IN CASE OF SPILL: Absorb spill with inert material. Place residue in suitable container. Consult Material Safety Data Sheet for additional information.

ADDITIONAL CANADIAN REGULATIONS:

CANADIAN DSL INVENTORY: Magnesium Chloride Hexahydrate is a hydrate of an anhydrous form which is on the DSUNDSL Inventory.

OTHER CANADIAN REGULATIONS: Not applicable.

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS: The components of this product are not on the CEPA Priorities Substances Lists.

CANADIAN WHMIS SYMBOLS: Not applicable.

16. OTHER INFORMATION

PREPARED BY: Pollard Highway Products

For Additional Information:

Contact: MSDS Coordinator – Pollard Highway Products

During business hours, Eastern Time - (519) 738-2213

NOTICE

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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 Pollard Highway Products.

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END OF MSDS