



Material Safety Data Sheet

A. PRODUCT INFORMATION

LIQUID SODIUM CHLORIDE
23%



TRADE NAME (PRODUCT IDENTIFIER): Sodium Chloride Brine	CLASSIFICATION & SYMBOL: Class D2B	
CHEMICAL NAME AND/OR SYNONYM: Liquid Sodium Chloride	FORMULA: 23.3% +/- .3% NaCl Solution	CAS NO: 7647-14-5 (anhydrous)
PRODUCT USE: Deicer, freeze-proofing of ores and aggregates, thawing agent.		
MANUFACTURER/IMPORTER: Trillium Distribution Inc 2351 Greenfield Courtright, Ontario N0N 1H0	SUPPLIER/DISTRIBUTOR: Pollard Highway Products Box 280 Harrow, Ontario N0R 1G0	
EMERGENCY TELEPHONE NO: 800-265-5619		

B. PREPARATION INFORMATION

PREPARED BY: Pollard Highway Products Harrow, Ontario Kevin Pollard	PREVIOUS ISSUE DATE: 01-01-2016
	CURRENT ISSUE DATE: 11-15-2017

C. TOXICOLOGICAL PROPERTIES

INHALATION: Vapours are unlikely due to physical properties. Mists may irritate nose, throat and lungs.	
INGESTION: Low in toxicity. May irritate gastrointestinal tract and cause nausea and vomiting.	
SKIN: May cause skin irritation.	
EYES: May irritate or burn eyes.	
ACUTE TOXICITY: Moderate toxic LD ₅₀ (oral-rat) 1000 mg/kg. Anhydrous basis LD ₅₀ (oral-mouse) 1940 mg/kg Anhydrous basis	EXPOSURE LIMITS: American Conference of Governmental Industrial Hygienists (ACGIH) Threshold limit value – Time Weighted Average (TLV-TWA) guideline for nuisance particulate (liquefied mist) 10 mg/m ³

CHRONIC TOXICITY: Not applicable	
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D. PHYSICAL DATA

MATERIAL IS AT NORMAL CONDITIONS: LIQUID <input checked="" type="checkbox"/> SOLID <input type="checkbox"/> GAS <input type="checkbox"/> <input type="checkbox"/>	APPEARANCE AND COLOR: Clear to slightly turbid liquid	ODOR THRESHOLD: Odorless
BOILING POINT: 106°C FREEZING POINT: -21 °C (MELTING POINT)	SPECIFIC GRAVITY: (H₂O = 1) 23% NaCl 1.175 @ 27C 24% NaCl 1.184 25% NaCl 1.192	VAPOR DENSITY: (AIR =1) Not applicable
SOLUBILITY IN WATER: Complete	pH Neutral to slightly alkaline	VAPOR PRESSURE: (mm Hg @ 20°C) 14 (PSIG)
EVAPORATION RATE: (Ether = 1.0) Not applicable	% VOLATILES BY VOLUME: (AT 20°C) Not applicable	MOLECULAR WEIGHT: 110.99 as anhydrous CaCl ₂
		COEFFICIENT OF WATER/OIL DISTRIBUTION: Not available

E. REACTIVITY DATA

STABILITY: UNSTABLE <input type="checkbox"/> STABLE <input checked="" type="checkbox"/>	CONDITIONS TO AVOID: Not applicable
INCOMPATIBILITY (MATERIALS TO AVOID): Reacts with most nonnoble metals such as iron or steel, bromine, or trifluoride. Potentially explosive reaction with dichloromaleic anhydride + urea. Electrolysis of mixtures with nitrogen compounds may form explosive nitrogen trichloride.	
HAZARDOUS DECOMPOSITION PRODUCTS: Toxic fumes of sodium oxide.	
HAZARDOUS POLYMERIZATION: WILL NOT OCCUR <input checked="" type="checkbox"/> MAY OCCUR <input type="checkbox"/>	OTHER PRECAUTIONS:

F. FIRE OR EXPLOSION HAZARD

CONDITIONS OF FLAMMABILITY: Not applicable	FLASH POINT: METHOD <u>NA</u>
HAZARDOUS COMBUSTION PRODUCTS: None	
UPPER FLAMMABLE LIMIT: NA LOWER FLAMMABLE LIMIT: NA AUTOIGNITION TEMPERATURE: °C	EXPLOSION HAZARDS: See Section E-Incompatibility.
SENSITIVITY TO MECHANICAL IMPACT: Not applicable	
SENSITIVITY TO STATIC DISCHARGE: Not applicable	

FIRE EXTINGUISHING PROCEDURES:

Use extinguisher media appropriate for surrounding fire. For fire fighting wear NIOSH-approved self-contained breathing apparatus.

G. HAZARDOUS INGREDIENTS (MIXTURES ONLY)

MATERIAL OR COMPONENT/C.A.S. #	CONCENTRATION	HAZARD DATA
Not applicable		

H. PREVENTIVE MEASURES

PERSONAL PROTECTIVE EQUIPMENT:

RESPIRATORY PROTECTION:

For misty conditions, wear NIOSH-approved mist respirator. Respirator should not contain any metals corrodible by these solutions.

EYES AND FACE:

For misty conditions, or when handling solutions where there is reasonable probability of eye contact, wear chemical safety goggles and hard hat. Under these conditions, do not wear contact lenses.

HANDS, ARMS, AND BODY:

As a minimum, wear long-sleeve shirt and trousers, impervious boots, gloves and apron, for routine product use.

STORAGE:

Keep container closed. Protect from physical damage. Do not store in metals which this solution corrodes. See Section E.

NORMAL HANDLING:

Avoid contact with eyes, skin or clothing. Avoid breathing mist. Use good personal hygiene and housekeeping.

ENGINEERING CONTROLS:

Ventilation: Provide general and/or local exhaust ventilation to maintain mist or vapor levels below exposure limits.

Eye wash facility should be provided in storage and general work area.

ENVIRONMENTAL:

DEGRADABILITY:

Not applicable

AQUATIC TOXICITY:

Harmful to aquatic life at concentrations greater than 500 ppm. NaCl does not bioaccumulate. $TL_{m96} > 1000$ mg/l

SPILL OR LEAK (ALWAYS WEAR PERSONAL PROTECTIVE EQUIPMENT):

Dilute small spills cautiously with plenty of water. Mop into metal drum and cover. (Many metals are slowly corroded by these solutions.) Cautiously spray residue with plenty of water. **Large spills:** dike up with any available absorbent (commercial, sand, etc.). Pump into same containers, and treat as above.

WASTE DISPOSAL:

Consistent with the requirements of local waste disposal authorities.

CANADIAN SHIPPING INFORMATION:

TDGA CLASS: Not applicable	PIN:	LABEL:
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I. FIRST AID MEASURES

INHALATION:

Promptly remove to fresh air. Get medical attention if any discomfort from inhalation.

INGESTION:

If conscious, immediately give 2 to 4 glasses of water, and induce vomiting under medical supervision. Get medical attention promptly.

SKIN:

Remove contaminated clothing. Wash with plenty of soap and running water. Get medical attention if irritation persists.

EYES:

Flush eyes promptly with plenty of running water, continuing for at least 15 minutes. Get medical attention.

THIS MATERIAL SAFETY DATA SHEET IS OFFERED FOR YOUR INFORMATION, CONSIDERATION AND INVESTIGATION AS REQUIRED BY FEDERAL HAZARDOUS PRODUCTS ACT AND RELATED LEGISLATION. THE INFORMATION IS BELIEVED TO BE ACCURATE BUT GENERAL CHEMICAL CANADA LTD. PROVIDES NO WARRANTIES, EITHER EXPRESSED OR IMPLIED.