



Technical Information *ClearLane® enhanced deicer*

DESCRIPTION:

ClearLane® enhanced deicer is an enhanced deicing salt product containing a pre-wetting agent, coloring agent, and a corrosion inhibitor. It is a highly effective performer that protects exposed steel surfaces from damp salt corrosion and remains free-flowing at low temperatures. It adheres to the road surface more effectively than dry salt, minimizing loss of deicer from wind and traffic scatter, providing more efficient deicing.

COMPLIANCE:

ClearLane® enhanced deicer is not approved for human or animal consumption. It is intended for use only as a chemical deicer on roadways and thoroughfares.

ADDITIVES:

ClearLane® enhanced deicer contains a patent pending pre-wetting agent.

APPLICATION:

ClearLane® enhanced deicer can be applied at the same rate as regular highway deicing salt. Depending on the conditions present at the time of application, **ClearLane® enhanced deicer** may be applied at lower application rates than regular deicing salt.

HANDLING AND STORAGE:

ClearLane® enhanced deicer requires no additional handling, equipment or labor over and above that used for regular highway deicing salt. To improve caking resistance and reduce run-off, it is recommended that the product be stored in a covered storage shed or tarped. Normal precautionary measures for the safe handling of deicers should be observed.

PACKAGING:

ClearLane® enhanced deicer is available only in bulk form.

CARGILL DEICING TECHNOLOGY

24950 Country Club
Blvd. Ste 450
North Olmsted, OH
44070
1-800-600-7258

METHODS OF ANALYSIS:

Methods of analysis are taken from the ASTM designations D 632-99, E 534-98, and from Cargill Salt. pH is reported on a dilution of 1 part pre-wetting agent to 4 parts water.

CHEMICAL ANALYSIS OF TREATED SALT

Component	Units	Typical
Sodium Chloride Deicing Salt	%	95.9
Pre-wetting Agent	%	4.1

CHEMICAL ANALYSIS OF PRE-WETTING AGENT

Component	CAS	Units	Typical
Water	7732-18-5	%	67 - 70
Magnesium chloride	7786-30-3	%	26 - 29
Sodium gluconate	527-07-1	%	0.25 - 0.35
Xanthan Gum	11138-66-2	%	0.2 - 0.4
Colorant Blend		%	0.01 - 0.06
FDC Blue 1	3844-45-9		
Tartrazine	1934-21-0		
FD&C Red 40	25956-17-6		
Trans-2851	proprietary	ppm	0.4 - 0.8
pH			7.0 - 8.6

SIEVE ANALYSIS:

U.S.S. Mesh	Opening Inches	Opening Microns	Specification
1/2"	0.500	12700	100
3/8"	0.375	9525	95 - 100
4	0.187	4760	20 - 90
8	0.0937	2380	10 - 60
30	0.0232	590	0 - 15

Note: Sieve analysis is reported as percent passing. The dry salt utilized in this product complies fully with ASTM specification D632-99, Type 1, Grade 1. Sieve analysis of the final product differs from the ASTM dry salt specification due to the effect of the liquid prewetting agent on the sieve.

PRODUCING LOCATIONS: VARIOUS LOCATIONS ACROSS THE U.S.

Material Number 100012763

No. 7714- Sept 2015 Rev 11

NOTICE: All of the above statements, recommendations, suggestions and data are based on our laboratory results, and we believe same to be reliable. Nevertheless, with the exception of data showing an express guaranty (such as in the case of products specifically designed for use as nutrient supplements), all such statements, recommendations, suggestions and data hereinabove presented are made without guaranty, warranty or responsibility of any kind on our part.



SAFETY DATA SHEET

1. Identification

Product identifier ClearLane® enhanced deicer

Other means of identification

SDS number NC19

Synonyms Sodium Chloride mixed with Magnesium Chloride

Recommended use Salt may be intended for several industrial applications includeing deicing.

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Cargill Incorporated

Address Minneapolis, MN 55440

Telephone 1-888-385-7258

Website www.cargillsalt.com

Emergency telephone number CHEMTREC (800) 424-9300

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.

Signal word None.

Hazard statement The mixture does not meet the criteria for classification.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Wash hands after handling.

Storage Store away from incompatible materials.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Sodium Chloride	7647-14-5	91.0-96.0
Water	7732-18-5	2.3-3.6
Magnesium chloride	7786-30-3	1.0-1.3
Sodium Gluconate	527-07-1	<0.02
Xanthan gum	11138-66-2	<0.02
FD&C Blue No. 1	3844-45-9	0.05 – 0.20
FD&C Red 40	25956-17-6	0.05 – 0.20
Tartrazine	1934-21-0	0.05 – 0.20

4. First-aid measures

Inhalation	If dust from the material is inhaled, remove the affected person immediately to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Give one or two glasses of water if patient is alert and able to swallow. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Use extinguishing agent suitable for type of surrounding fire.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed such as: Carbon oxides (COx). Hydrogen chloride gas. Metal oxides.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Use water spray to cool unopened containers.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	This product is not flammable or combustible.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Avoid inhalation of dust from the spilled material. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product. Collect dust using a vacuum cleaner equipped with HEPA filter. Minimize dust generation and accumulation. Avoid release to the environment. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Provide appropriate exhaust ventilation at places where dust is formed. Minimize dust generation and accumulation. Avoid breathing dust. Avoid contact with eyes. Avoid contact with water and moisture. Keep away from strong acids. May evolve chlorine gas when in contact with strong acids. Hydrogen chloride release above 1400°F. Do not reuse containers. Practice good housekeeping.
Conditions for safe storage, including any incompatibilities	Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Becomes hygroscopic at 70-75% relative humidity. Avoid humid or wet conditions as product will cake and become hard. Keep out of reach of children.

8. Exposure controls/personal protection

Occupational exposure limits	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Unvented, tight fitting goggles should be worn in dusty areas.

Skin protection	
Hand protection	Wear appropriate chemical resistant gloves.
Skin protection	
Other	Wear suitable protective clothing.
Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	Green damp crystalline solid.
Physical state	Solid.
Form	Damp crystalline solid.
Color	Green.
Odor	None.
Odor threshold	Not available.
pH	7 - 8.6
Melting point/freezing point	1473.8 °F (801 °C)
Initial boiling point and boiling range	2669 °F (1465 °C) (760 mmHg)
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	2.4 mm Hg (1376.6 °F (747 °C))
Vapor density	Not available.
Relative density	2.16 (H2O = 1)
Solubility(ies)	
Solubility (water)	26.4 %
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Bulk density	72 - 80 lb/ft³
Molecular formula	NaCl, MgCl2
Molecular weight	NaCl = 58.44, MgCl2 = 95.22
pH in aqueous solution	5 - 9

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.

Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).
Incompatible materials	Avoid contact with strong acids, caustics, ammonia and cyanides. Sodium chloride is incompatible with lithium and bromine trifluoride. Magnesium chloride is incompatible with Furan-2-peroxycarboxylic acid.
Hazardous decomposition products	May evolve chlorine gas when in contact with strong acids. Possibly chlorine, nitrogen and sodium containing compounds.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Inhalation of dusts may cause respiratory irritation.
Skin contact	Prolonged or repeated skin contact may cause irritation. If applied to damaged skin, absorption can occur with effects similar to those via ingestion.
Eye contact	Dust in the eyes will cause irritation.
Ingestion	Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics

Eye and skin contact: Exposure may cause temporary irritation, redness, or discomfort. For ingestion, consuming less than a few grams would not be harmful. The following effects were observed after ingesting an excessive quantity: nausea and vomiting, diarrhea, cramps, restlessness, irritability, dehydration, water retention, nose bleed, gastrointestinal tract damage, fever, sweating, sunken eyes, high blood pressure, muscle weakness, dry mouth and nose, shock, cerebral edema (fluid on brain), pulmonary edema (fluid in lungs), blood cell shrinkage, and brain damage (due to dehydration of brain cells). Death is generally due to cardiovascular collapse or CNS damage.

Information on toxicological effects

Acute toxicity	In some cases of confirmed hypertension, ingestion may result in elevated blood pressure. Ingestion of large amounts (greater than 0.1 pound) can cause gastrointestinal upset and irritation of the stomach. Rare cases of over exposure can lead to systemic toxicity related to the binding of ionized blood calcium.
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Components	Species	Test Results
Magnesium chloride (CAS 7786-30-3)		
<u>Acute</u>		
Oral		
LD50	Rat	2800 mg/kg
Sodium Chloride (CAS 7647-14-5)		
<u>Acute</u>		
Oral		
LD50	Rat	3000 mg/kg
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.	
Serious eye damage/eye irritation	Dust in the eyes will cause irritation.	
Respiratory or skin sensitization		
Respiratory sensitization	Not available.	
Skin sensitization	This product is not expected to cause skin sensitization.	
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.	
IARC Monographs. Overall Evaluation of Carcinogenicity		
FD&C Blue No. 1 (CAS 3844-45-9)	3 Not classifiable as to carcinogenicity to humans.	
NTP Report on Carcinogens		
Not listed.		
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)		
Not regulated.		
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.	
Specific target organ toxicity - single exposure	Not classified.	

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Due to the physical form of the product it is not an aspiration hazard.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Mobility in soil No data available.

Other adverse effects None known.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

US federal regulations This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

Classified hazard categories Acute toxicity (any route of exposure)

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)

Not regulated.

US state regulations

US. Massachusetts RTK - Substance List

FD&C Blue No. 1 (CAS 3844-45-9)

US. New Jersey Worker and Community Right-to-Know Act

Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law

Not listed.

US. Rhode Island RTK

Not regulated.

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Magnesium chloride (CAS 7786-30-3)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	30-December-2014
Revision date	16-April-2018
Version #	04
HMIS® ratings	Health: 1 Flammability: 0 Physical hazard: 0 Personal protection: A

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