Compass Minerals

MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product Name

Safe Step Pro Series 750 Magnesium Chloride

CAS#

Mixture

Product use

De-icer

Manufacturer

North American Salt Company A Compass Minerals Company 9900 West 109th Street, Suite 600 Overland Park, KS 66210 US

Phone: 913-344-9200

CHEMTREC

1-800-424-9300 1-613-996-6666

LEGEND
HMIS/NFPA

Severe 4
Serious 3
Moderate 2
Slight 1





2. Hazards Identification

Emergency overview

CAUTION

Contact may cause eye and skin irritation.

Potential short term health effects

0

Routes of exposure

Eye, Skin contact, Inhalation, Ingestion.

Eyes

Minimal

May cause irritation.

Skin

May cause irritation.

Inhalation

Dusts of this product may cause irritation of the nose, throat, and respiratory tract.

Ingestion

May cause stomach distress, nausea or vomiting.

Target organs

Eyes. Skin. Respiratory system.

Chronic effects

Prolonged or repeated exposure can cause drying, defatting and dermatitis.

Signs and symptoms

Symptoms may include redness, edema, drying, defatting and cracking of the skin. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and

vomiting.

3. Composition / Information on Ingredients

Ingredient(s)	CAS#	Percent
Magnesium chloride, hexahydrate	7791-18-6	60 - 100

4. First Aid Measures

First aid procedures

Eye contact Flush with cool water. Remove contact lenses, if applicable, and continue flushing.

Obtain medical attention if irritation persists.

Skin contact Flush with cool water. Wash with soap and water. Obtain medical attention if irritation

persists.

Inhalation If symptoms develop move victim to fresh air. If symptoms persist, obtain medical

attention.

Ingestion Do not induce vomiting. Never give anything by mouth if victim is unconscious, or is

convulsing. Obtain medical attention.

General advice If you feel unwell, seek medical advice (show the label where possible).

5. Fire Fighting Measures

Flammable properties

Not flammable by WHMIS/OSHA criteria.

Extinguishing media

Suitable extinguishing media

Unsuitable extinguishing media Not available

Treat for surrounding material.

Protection of firefighters

Specific hazards arising from

the chemical

Not available

Protective equipment for

firefighters

Firefighters should wear full protective clothing including self contained breathing

apparatus

Hazardous combustion products

May include and are not limited to: Hydrogen chloride. Chlorine gas. Oxides of

magnesium.

Explosion data

Sensitivity to mechanical

impact

Not available.

Sensitivity to static discharge

Not available.

6. Accidental Release Measures

Personal precautions
Methods for containment
Methods for cleaning up

Avoid dust formation.

Prevent entry into waterways, sewers, basements or confined areas.

Small spill and leak. Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements. Large spill and leak. Contact emergency service for advice. Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

7. Handling and Storage

Handling Storage Use good industrial hygiene practices in handling this material. Avoid breathing dust. Keep out of reach of children. Store in a closed container away from incompatible materials.

8. Exposure Controls / Personal Protection

Exposure limits

Ingredient(s)

Exposure Limits

Magnesium chloride, hexahydrate

ACGIH-TLV
Not established
OSHA-PEL
Not established

Engineering controls

TWA PEL: No specific limits have been established for magnesium chloride (soluble substances). As a guideline, OSHA (United States) has established the following limits which are generally recognized for inert or nuisance dust. Particulates not otherwise regulated (PNOR): 5mg/m3. Respirable Dust 8-Hour TWA PEL, 15mg/m3 Total Dust 8-Hour TWA PEL.

TWA TLV: No specific limits have been established for magnesium chloride (soluble substances). As a guideline, ACGIH (United States) has established the following limits which are generally recognized for inert or nuisance dust. Particulates (insolubles) Not Otherwise Classified (PNOC): 10 mg/m3. Inhalable Particulate TWA TLV, 3 mg/m3. Respirable Particulate TWA TLV.

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Personal protective equipment

Eye / face protection Hand protection Safety glasses

Rubber gloves. Confirm with a reputable supplier first.

Skin and body protection

As required by employer code.

Respiratory protection

Where exposure guideline levels may be exceeded, use an approved NIOSH respirator

or NIOSH-approved filtering facepiece.

General hygiene considerations Use good industrial hygiene practices in handling this material. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

9. Physical and Chemical Properties

Appearance Granular solid Color Gray/ white **Form** Granules Odor Odorless Odor threshold Not Available

Physical state Solid

рН Not Available

Melting point 320.00 °F (160 °C) Freezing point Not Applicable

Boiling point 2575.40 °F (1413 °C) Pour point

Not available **Evaporation rate** Not Available Flash point Not available Auto-ignition temperature Not available Flammability limits in air, lower, % Not applicable

by volume

Flammability limits in air, upper, % Not applicable

by volume

Vapor pressure Not Available Vapor density Not Available Specific gravity 1.56 @21°C Relative density Not Available Octanol/water coefficient Not available Solubility (H2O) Complete Not Available

VOC (Weight %) Viscosity Not Available Percent volatile Not Available Molecular weight 203.3000 Molecular formula MgCl2*6H20

10. Stability and Reactivity

Chemical stability Stable under recommended storage conditions.

Conditions to avoid Do not mix with other chemicals.

Incompatible materials Oxidizers. Acids.

Hazardous decomposition products May include and are not limited to: Hydrogen chloride. Chlorine gas. Oxides of

magnesium.

Possibility of hazardous reactions Hazardous polymerization does not occur.

11. Toxicological Information

Component analysis - LC50

Ingredient(s) LC50

Magnesium chloride, hexahydrate

Not available

Component analysis - Oral LD50

Ingredient(s) LD50

Magnesium chloride, hexahydrate 8100 mg/kg rat

#17491

Effects of acute exposure

EyeMay cause irritation.SkinMay cause irritation.

Inhalation Dusts of this product may cause irritation of the nose, throat, and respiratory tract.

Ingestion May cause stomach distress, nausea or vomiting.

SensitizationNot classified or listed by IARC, NTP, OSHA and ACGIH.Chronic effectsNot classified or listed by IARC, NTP, OSHA and ACGIH.CarcinogenicityNot classified or listed by IARC, NTP, OSHA and ACGIH.MutagenicityNot classified or listed by IARC, NTP, OSHA and ACGIH.Reproductive effectsNot classified or listed by IARC, NTP, OSHA and ACGIH.TeratogenicityNot classified or listed by IARC, NTP, OSHA and ACGIH.

Synergistic Materials Not available

12. Ecological Information

Ecotoxicity May be harmful to freshwater aquatic species and to plants that are not saline tolerant. **Environmental effects** Not available

Aquatic toxicity

Persistence / degradability

Bioaccumulation / accumulation

Partition coefficient

Mobility in environmental media
Chemical fate information

Other adverse effects

Not available
Not available
Not available

13. Disposal Considerations

Waste codes Not available

Disposal instructions Waste must be disposed of in accordance with federal, state and local environmental

control regulations.

Waste from residues / unused

products

unused Not available

Contaminated packaging Not available

14. Transport Information

U.S. Department of Transportation (DOT)

Not regulated as dangerous goods.

Transportation of Dangerous Goods (TDG - Canada)

Not regulated as dangerous goods.

15. Regulatory Information

Canadian federal regulations This product has been classified in accordance with the hazard criteria of the Controlled

Products Regulations and the MSDS contains all the information required by the

Controlled Products Regulations.

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. CERCLA/SARA Hazardous Substances - Not applicable.

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous

No

chemical

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

Section 302 extremely hazardous substance

Nο

Section 311 hazardous chemical No

Clean Air Act (CAA)

Not available

Clean Water Act (CWA)

Not available

WHMIS status

Not Controlled

State regulations

This product does not contain a chemical known to the State of California to cause

cancer, birth defects or other reproductive harm.

Inventory name

Country(s) or region

Inventory name

On inventory (yes/no)*

Canada Canada

Domestic Substances List (DSL)
Non-Domestic Substances List (NDSL)

Yes No

United States & Puerto Rico

Toxic Substances Control Act (TSCA) Inventory

Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

Disclaimer

Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

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Prepared by

Dell Tech Laboratories Ltd. (519) 858-5021