MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product Name

Safe Step Pro Series 550 Select Blend

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

LEGEND HMIS/NFPA	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0





2. Hazards Identification

Emergency overview

CAUTION

Contact may cause eye and skin irritation.

Potential short term health effects

Routes of exposure

Eye, Skin contact, Inhalation, Ingestion.

Eyes

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 70 - 100
Sodium chloride	7647-14-5	
Potassium chloride	7447-40-7	3 - 25
Urea	57-13-6	0.1 - 1

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.

Notes to physician General advice

Symptoms may be delayed.

Avoid contact with eyes and skin. Keep out of reach of children.

5.	Fire	Fighting	Measures
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Flammable properties

Not flammable by OSHA criteria.

Extinguishing media

Suitable extinguishing media

Treat for surrounding material.

Unsuitable extinguishing media Not available

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

May include and are not limited to: Halogenated compounds. Some metallic oxides.

apparatus.

Hazardous combustion products

Explosion data

Sensitivity to mechanical

impact

Not available

Sensitivity to static discharge

Not available

6. Accidental Release Measures

Personal precautions

Before attempting clean up, refer to hazard data given above. Use broom or dry vacuum to collect material for proper disposal without raising dust. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Methods for containment Methods for cleaning up

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

Before attempting clean up, refer to hazard data given above. Use broom or dry vacuum to collect material for proper disposal without raising dust. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

7. Handling and Storage

Handling Storage

Avoid breathing dusts from this material.

Keep out of reach of children. Keep containers tightly closed in a cool, well-ventilated place.

8. Exposure Controls / Personal Protection

Exposure limits

Ingredient(s)

Exposure Limits

Potassium chloride

ACGIH-TLV Not established **OSHA-PEL**

Not established

Sodium chloride

ACGIH-TLV Not established **OSHA-PEL**

Urea

ACGIH-TLV Not established **OSHA-PEL**

Not established

Not established

Engineering controls

TWA PEL: No specific limits have been established for potassium chloride or sodium 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/cu.m. Respirable Dust 8-Hour TWA PEL, 15mg/cu.m. Total Dust 8-Hour TWA PEL.

TWA TLV: No specific limits have been established for potassium chloride or sodium 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): 10mg/cu.m. Inhalable Particulate 8-Hours TWA TLV, 3mg/cu.m. Respirable Particulate TWA TLV.

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. If user operations generate dust, fumes, or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal protective equipment

Eye / face protection

Wear safety glasses with side shields.

Hand protection

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 Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

9. Physical and Chemical Properties

Appearance	Crystalline.	
Color	White	
Form	Solid.	
Odor	Odorless	
Odor threshold	Not available	
Physical state	Solid	
pH	Not available	
Freezing point	Not available	
Boiling point	Not available	
Pour point	Not available	
Evaporation rate	Not available	
Flash point	Not applicable	
Auto-ignition temperature	Not available	
Flammability limits in air, lower, % by volume	Not applicable	
Flammability limits in air, upper, $\%$ by volume	Not applicable	
Vapor pressure	Not available	
Vapor density	Not available	
Specific gravity	Not available	
Octanol/water coefficient	Not available	
Solubility (H2O)	Partially soluble	

10. Stability and Reactivity

Chemical stability

Conditions to avoid

Do not mix with incompatible materials.

Incompatible materials

This product reacts with acids.

Hazardous decomposition products

May include and are not limited to: Halogenated compounds. Some metallic oxides.

Possibility of hazardous reactions Hazardous polymerization does not occur.

11. Toxicological Information				
Component analysis - LC50 Ingredient(s)	LOED			
	LC50			
Potassium chloride	Not available			
Sodium chloride	> 21000 mg/m3 rat			
Urea	Not available			
Component analysis - Oral LD50 Ingredient(s)	LD50			
Potassium chloride	1500 mg/kg mouse; 2500 mg/kg guinea pig; 2600 mg/kg rat			
Sodium chloride	3000 mg/kg rat; 4000 mg/kg mouse			
Urea	11000 mg/kg mouse; 8471 mg/kg rat; 510 mg/kg cattle; 510 mg/kg sheep			
Effects of acute exposure				
Eye	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.			
Sensitization	Not classified or listed by IARC, NTP, OSHA and ACGIH.			
Chronic effects	Not classified or listed by IARC, NTP, OSHA and ACGIH.			
Carcinogenicity	Not classified or listed by IARC, NTP, OSHA and ACGIH.			
Mutagenicity	Not classified or listed by IARC, NTP, OSHA and ACGIH.			
Reproductive effects	Not classified or listed by IARC, NTP, OSHA and ACGIH.			
Teratogenicity	Not 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	Not available			
Persistence / degradability	Not available			
Bioaccumulation / accumulation	Not available			
Partition coefficient	Not available			
Mobility in environmental media	Not available			
Chemical fate information	Not available			
	13. Disposal Considerations			
Waste codes	Not available			
Disposal instructions	Waste must be disposed of in accordance with federal, state/provincial and local environmental control regulations.			
Waste from residues / unused products	Not available			
Contaminated packaging	Not available			
	14. Transport Information			

U.S. Department of Transportation (DOT)

Not regulated as dangerous goods.

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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.

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

No

Section 311 hazardous chemical No

Clean Air Act (CAA) Clean Water Act (CWA) Not available Not available

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 status

Country(s) or region

Inventory name

On inventory (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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