1.1. Product identifier

Product form	: Granular
Substance name	: Urea, Sodium Formate, Potassium Acetate
Product code	: Salt
Other means of identification	: Chloride Free, Raw Salt, Road Salt, Deicing Salt, Water Softening Salt, Feed Salt, Industrial Salt, Hide Salt, Rocanville Coarse, Rocanville Standard, Rocanville, Fine, Vanscoy Coarse, Vanscoy Standard, Bath Salt, Ice Biter, North Pro Nature

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/preparation : De-icer

1.3 Details of the supplier of the safety data sheet

Northern Salt, Inc.
20920 Forest Road North
Forest Lake, MN 55025
Phone: 651-209-3148
Fax: 651-407-0609
Email: info@northernsalt.com

Website:
www.northernsalt.com

1.3. Emergency telephone number

Emergency number 651-209-3148
1-888-668-7258

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Not Classified

2.2. Label elements

None

Signal word (GHS-US)	: None
Hazard statements (GHS-US)	: Product does not meet criteria for classification
Precautionary statements (GHS-US)	: Prevention – Implement acceptable industrial hygiene practices Response – Wash hands thoroughly after handling Storage – store in well ventilated space a safe distance from incompatible materials Disposal – Dispose of waste/residues in accordance with local authority requirements

2.3. Other hazards No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
Urea	(CAS No.) 57-13-6	70	Generally recognized as safe
Sodium Formate	(CAS No.) 141-53-7	30	Eye limit 2A, H319
Potassium Acetate	(CAS No.) 127-08-2	-	Generally recognized as safe

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: If medical advice is needed, have product container or label at hand.
First-aid measures after inhalation	: If inhaled, remove to fresh air and keep at rest in a position comfortable for breathing. Give oxygen or artificial respiration if necessary. Obtain medical attention if breathing difficulty persists.
First-aid measures after skin contact	: Wash skin thoroughly with mild soap and water. Obtain medical attention if irritation develops or persists.

First-aid measures after eye contact : Immediately rinse with water for a prolonged period (15 minutes) while holding the eyelids wide open including upper and lower lids. Obtain medical attention if pain and irritation develops or persists.

First-aid measures after ingestion : Do not induce vomiting. Administer water if patient is conscious. Ingesting will usually cause purging of the stomach by vomiting. Seek medical attention if a large amount is swallowed. Get medical advice and attention if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : Irritation to eyes, skin and respiratory tract.

Symptoms/injuries after inhalation : Overexposure may be irritating to the respiratory system.

Symptoms/injuries after skin contact : May cause skin irritation.

Symptoms/injuries after eye contact : May cause eye irritation.

Symptoms/injuries after ingestion : If a large quantity has been ingested : Abdominal pain; Diarrhea; Nausea; Vomiting; Tingling in hands and feet; Weak pulse; Circulatory disturbances

Chronic symptoms : Prolonged inhalation of dust may cause respiratory irritation.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Not flammable. Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Under conditions of fire this material may produce: toxic fumes

Explosion hazard : Product is not explosive.

Reactivity : Stable at ambient temperature and under normal conditions of use.

5.3. Advice for firefighters

Firefighting instructions : Keep upwind. Under conditions of fire this material may produce: Potassium oxides; Hydrogen chloride; Chlorine gas

Protection during firefighting : Wear full fire-fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

Other information : Do not allow run-off from firefighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment, and emergency procedures

General measures : Do not breathe fumes from fires or vapors from decomposition.

6.1.1. For non-emergency personnel

Protective equipment : Wear suitable protective clothing, gloves and eye/face protection including tight fitting goggles in areas of high dust concentration. Wear NIOSH approved respiratory protective equipment when workplace conditions warrant use of respirator.

Emergency procedures	: Collect as any solid. Ventilate area.

6.1.2. For emergency responders

Protective equipment	: Wear suitable protective clothing, gloves and eye/face protection including tight fitting goggles in areas of high dust concentration. Wear NIOSH approved respiratory protective equipment when conditions warrant use of respirator.
Emergency procedures	: If possible, stop flow of product. Contain and collect as any solid. Ventilate area.

6.2. Environmental precautions

If spill could potentially enter any waterway, including intermittent dry creeks, contact the U.S. COAST GUARD NATIONAL RESPONSE CENTER at 800-424-8802. In case of accident or road spill notify CHEMTREC at 800-424-9300 (in USA) or CANUTEC at 613-996-6666 (in Canada). In other countries call CHEMTREC at (International code) +1-703-527-3887.

6.3. Methods and material for containment and cleaning up

For containment	: Contain and collect as any solid. Do not allow into drains or water courses or dispose of where ground or surface waters may be affected.
Methods for cleaning up	: Recover the product by vacuuming, shoveling or sweeping. Avoid generation of dust during clean-up of spills. If uncontaminated, recover and reuse as product.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	: When heated, material emits irritating fumes.
Precautions for safe handling	: Handle in accordance with good industrial hygiene and safety procedures. Avoid contact with skin and eyes. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
Hygiene measures	: Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Store tightly closed in a dry, cool and well-ventilated place. Protect from moisture.
Special rules on packaging	: Avoid contact with aluminum or carbon steel to minimize corrosion.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Highly soluble – No ACGIH TWA, Particulate Not Otherwise Specified (PNOS) not appropriate for highly soluble material.

8.2. Exposure controls

Appropriate engineering controls : Ensure adequate ventilation, especially in confined areas.

Personal protective equipment : Gloves. Safety glasses. Protective clothing.

Hand protection : Impermeable protective gloves.

Eye protection : Protective goggles and safety glasses

Skin and body protection : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Wear suitable protective clothing. Wash contaminated clothing before reuse. Handle in accordance with good industrial hygiene and safety practice. Wash clothing frequently.

Respiratory protection : Use NIOSH-approved air-purifying or supplied-air respirator where airborne concentrations of dust are expected to exceed exposure limits.

Environmental exposure controls : Ensure adequate ventilation, especially in confined areas.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

Appearance : Crystalline solid.

Color : White
Light Green to Dark Green

Odor : None

Odor threshold : No data available

pH : 6-11

Relative evaporation rate (butylacetate=1) : No data available

Melting point : 132.6ºF (271°C)

Freezing point : No data available

Boiling point : No data available

Flash point : No data available

Self ignition temperature : Not flammable

Decomposition temperature : No data available

Flammability (solid, gas)	: Not flammable
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: 2.31 g/cm3
Density	: No data available
Solubility	: 1.193 g/l @25°C
Log Pow	: -1.59 @ 20°C
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: None known.
Oxidizing properties	: None known.
Explosive limits	: Not explosive

9.2. Other information

VOC content	: No data available
Bulk Density	: 44-49 lb/sq^3
Molecular Formula	: CH_4N_2O

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable at ambient temperature and under normal conditions of use.

10.2. Chemical stability

Stable at standard temperature and pressure.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Protect from moisture.

10.5. Incompatible materials

May form explosive mixture if in contact with strong acid such as nitic or perchloric acids. Avoid contact with strong oxidizers; strong acids or bases; nitrates; hypo chlorites. Reacts with sodium or calcium hypochlorite to form explosive nitrogen trichloride.

10.6. Hazardous decomposition products

Under conditions of fire this material may produce; Nitrogen oxides; Ammonia; Biuret; Carbon oxides

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Urea	
LD50 oral rat	8471 mg/kg
LD50 dermal rabbit	Not Classified
LC50 inhalation rat (mg/l)	Not Classified
Additional Information	Safety Data Sheet Supplier
Sodium Formate	
LD50 oral rat	2301 mg/kg bodyweight (OECD 401 method)
LD50 dermal rabbit	> 5000 mg/kg
ATE US (oral)	2301.000 mg/kg bodyweight
Additional Information	Safety Data Sheet Supplier
Potassium Acetate	
LD50 oral rat	3250mg/kg
LD50 dermal rabbit	> 20000 mg/kg
ATE US (oral)	6,250.00 mg/kg
Additional Information	Safety Data Sheet Supplier

Serious eye damage/irritation : Deicer dust can cause eye irritation

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

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.

Environmental Fate : Environmentally Friendly

Toxicity : Low toxicity to aquatic organisms

Degradation Products : Ultimately biodegradable (OECDTG 302B)

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Sewage disposal recommendations : This material may be hazardous to the aquatic environment. Keep out of sewers and waterways.

Waste disposal recommendations : Place in an appropriate container and dispose of the contaminated material at a licensed site.

Additional information : Dispose of waste material in accordance with all local, regional, national, and international regulations.

SECTION 14: Transport information

In accordance with DOT / TDG / ADR / RID / ADNR / IMDG / ICAO / IATA

14.1. UN number

No dangerous good in terms of transport regulations.

14.2. UN proper shipping name

Not applicable

14.2 Additional information

Other information : No supplementary information available.

Overland transport

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

Urea Dry SARA Section 311/312 Hazard Classes / Immediate (acute) health hazard
Sodium Formate Not applicable
Potassium Acetate Not Applicable
Listed on the Unites States TSCA (Toxic Substances Control Act) inventory

15.2. US State regulations

The following states have an OSH program approved by OSHA. If you are located in any of these states you may be under state jurisdiction rather than federal jurisdiction and your state may have more stringent requirements than OSHA. You should consult your state regulations to ensure compliance.

Alaska	Indiana	Minnesota	North Carolina	Utah
Arizona	Iowa	Nevada	Oregon Puerto	Vermont
California	Kentucky	New Mexico	Rico	*Virgin Islands
*Connecticut	Maryland	*New Jersey	South Carolina	Virginia
Hawaii	Michigan	*New York	Tennessee	Washington
*Illinois				Wyoming

*The state plans in these states apply only to public sector employers. In these states private sector employers are subject to USOL – OSHA jurisdiction. All other state plans apply to both public and private sector employers.

Urea (57-13-6)
U.S. – Minnesota Hazardous Substance List
U.S. – Texas – Effects Screening Levels – Long Term
U.S. – Texas – Effects Screening Levels – Short Term

15.3. Canadian regulations

Urea, Dry	
Listed on the Canadian DSL (Domestic Substances List) inventory.	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

SECTION 16: Other information

NFPA health hazard	: 2- Exposure could cause irritation but only minor residual injury even if no treatment is given.
NFPA fire hazard	: 0 - Materials that will not burn.
NFPA reactivity	: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.

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