Safety Data Sheet

MORTON SALT, INC.

Section 1: Identification

Product identifier

Product Name · Clean and Protect + Rust Defense

Synonyms • Water Conditioning Salt

SDS Number/Grade • 1471

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

Recommended use• Recharging water conditioner ion exchange resin regeneration

Details of the supplier of the safety data sheet

Manufacturer
 Morton Salt, Inc.

123 N. Wacker Drive Chicago, IL 60606 United States

saltinfo@mortonsalt.com

Telephone (General) • 312-807-2000

Emergency telephone number

Manufacturer • 312-807-2000

Section 2: Hazard Identification

UN GHS Revision 3

According to: UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS): Third Revised Edition

Classification of the substance or mixture

UN GHS
 Not classified

Label elements

UN GHS

Hazard statements · No label element(s) required

Precautionary statements

Other hazards

UN GHS
 According to the Globally Harmonized System for Classification and Labeling (GHS)

this product is not considered hazardous

United States (US)

Preparation Date: 03/January/2017

Revision Date: 02/March/2017

According to: OSHA 29 CFR 1910.1200 HCS

Classification of the substance or mixture

OSHA HCS 2012 • Not classified

Label elements

OSHA HCS 2012

Hazard statements • No label element(s) required

Other hazards

• This product is not considered hazardous under the U.S. OSHA 29 CFR 1910.1200

Hazard Communication Standard.

Canada

According to: WHMIS 2015

Classification of the substance or mixture

WHMIS 2015

· Not classified

Label elements

WHMIS 2015

Hazard statements · No label element(s) required

Precautionary statements

Other hazards

WHMIS 2015
 In Canada, the product mentioned above is not considered hazardous under the

Workplace Hazardous Materials Information System (WHMIS).

Section 3 - Composition/Information on Ingredients

Substances

· Material does not meet the criteria of a substance.

Mixtures

Composition					
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comments
Sodium chloride	CAS :7647-14	98.505% TO 98.90121%	Ingestion/Oral-Rat LD50 • 3000 mg/kg	UN GHS Revision 3: Not Classified OSHA HCS 2012: Not Classified WHMIS 2015: Not Classified	NDA
Citrates	Proprietary	0.33% TO 0.55%	NDA	UN GHS Revision 3: Not Classified OSHA HCS 2012: Not Classified WHMIS 2015: Not Classified	NDA
Anionic Surfactant	Proprietary	0.0036% TO 0.00945%	NDA	OSHA HCS 2012: Exposure Limit	NDA
Anionic Surfactant	Proprietary	0.00084% TO 0.00273%	NDA	OSHA HCS 2012: Exposure Limit	NDA
Anionic Surfactant	Proprietary	<= 0.000315%	NDA	OSHA HCS 2012: Exposure Limit	NDA

Section 4: First-Aid Measures

Description of first aid measures

Inhalation

 Move victim to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing.

Skin

IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.

Eye

In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. If eye irritation persists: Get medical advice/attention.

Ingestion

• If large quantities are swallowed, call a physician immediately.

Most important symptoms and effects, both acute and delayed

· Refer to Section 11 - Toxicological Information.

Indication of any immediate medical attention and special treatment needed

Notes to Physician

 All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Section 5: Fire-Fighting Measures

Extinguishing media

Suitable Extinguishing Media • Material is non-combustible. In case of fire use media as appropriate for surrounding

Unsuitable Extinguishing

No data available.

Media

Special hazards arising from the substance or mixture

Unusual Fire and Explosion

Hazards

No unusual fire or explosion hazards known.

Hazardous Combustion

Products

No data available

Advice for firefighters

Structural firefighters' protective clothing will only provide limited protection. Wear positive pressure self-contained breathing apparatus (SCBA).

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions

Wear suitable protective clothing, gloves, and eye/face protection.

Emergency Procedures

· Stop leak if you can do it without risk. Keep unauthorized personnel away. Use normal clean up procedures.

Environmental precautions

 None expected to be necessary if material is used under ordinary conditions and asrecommended.

Methods and material for containment and cleaning up

Containment/Clean-up Measures

Carefully shovel or sweep up spilled material and place in suitable container.

Reference to other sections

 Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

Section 7 - Handling and Storage

Preparation Date: 03/January/2017 Format: GHS Language: English (US) Revision Date: 02/March/2017 UN GHS Revision 3, OSHA HCS 2012, WHMIS 2015

Precautions for safe handling

Handling

· Use good safety and industrial hygiene practices. Wash thoroughly after handling. Keep out of reach of children.

Conditions for safe storage, including any incompatibilities

Storage

Avoid storage with strong acids and strong oxidizing agents.

Incompatible Materials or **Ignition Sources**

Strong oxidizing agents, strong acids.

Specific end use(s)

· Refer to Section 1.2 - Relevant identified uses.

Section 8 - Exposure Controls/Personal Protection

Control parameters

Exposure Limits/Guidelines

No applicable exposure limits available for product or components.

Exposure controls

Engineering Measures/Controls Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values.

Personal Protective Equipment

Respiratory

In case of insufficient ventilation, wear suitable respiratory equipment.

Eye/Face

Wear safety glasses.

Skin/Body

Wear appropriate gloves.

General Industrial Hygiene

Considerations

Do not get in eyes or on skin or clothing. Handle in accordance with good industrial hygiene and safety practice.

Environmental Exposure Controls

Follow best practice for site management and disposal of waste.

Information on Physical and Chemical Properties

Section 9 - Physical and Chemical Properties

Material Description			
Physical Form	Solid	Appearance/Description	White pellet.
Color	White	Odor	No data available
Odor Threshold	No data available		
General Properties			
Boiling Point	2575 °F(1412.7778 °C)	Melting Point/Freezing Point	1473.8 °F(801 °C)
Decomposition Temperature	No data available	рН	2.5 to 3
Specific Gravity/Relative Density	= 2.165 Water=1	Water Solubility	Soluble 100 %
Viscosity	No data available		
Volatility			
Vapor Pressure	1 mmHg (torr) @ 1589 °F(865 °C)	Vapor Density	No data available
Evaporation Rate	No data available		
Flammability			-
Flash Point	No data available	UEL	No data available
LEL	No data available	Autoignition	No data available
Flammability (solid, gas)	No data available		
Environmental			
Octanol/Water Partition coefficient	No data available		

Section 10: Stability and Reactivity

Reactivity

· No dangerous reaction known under conditions of normal use.

Chemical stability

Stable

Possibility of hazardous reactions

· Hazardous polymerization will not occur.

Conditions to avoid

• Incompatible materials.

Incompatible materials

• Will react with strong acids (to generate hydrogen chloride) and strong oxidizing agents (to generate chlorine gas).

Hazardous decomposition products

No data available

Section 11 - Toxicological Information

Information on toxicological effects

Components				
Sodium chloride (98.505% TO 98.90121%)		Acute Toxicity: Ingestion/Oral-Rat LD50 • 3000 mg/kg; Irritation: Eye-Rabbit • 10 mg • Moderate irritation; Skin-Rabbit • 500 mg 24 Hour(s) • Mild irritation		

GHS Properties	Classification
Acute toxicity	UN GHS 3 • No data available OSHA HCS 2012 • No data available WHMIS 2015 • No data available
Skin corrosion/Irritation	UN GHS 3 • No data available OSHA HCS 2012 • No data available WHMIS 2015 • No data available
Serious eye damage/Irritation	UN GHS 3 • No data available OSHA HCS 2012 • No data available WHMIS 2015 • No data available
Skin sensitization	UN GHS 3 • No data available OSHA HCS 2012 • No data available WHMIS 2015 • No data available
Respiratory sensitization	UN GHS 3 • No data available OSHA HCS 2012 • No data available WHMIS 2015 • No data available
Aspiration Hazard	UN GHS 3 • No data available OSHA HCS 2012 • No data available WHMIS 2015 • No data available
	UN GHS 3 • No data available

Carcinogenicity	OSHA HCS 2012 • No data available WHMIS 2015 • No data available
Germ Cell Mutagenicity	UN GHS 3 • No data available OSHA HCS 2012 • No data available WHMIS 2015 • No data available
Toxicity for Reproduction	UN GHS 3 • No data available OSHA HCS 2012 • No data available WHMIS 2015 • No data available
STOT-SE	UN GHS 3 • No data available OSHA HCS 2012 • No data available WHMIS 2015 • No data available
STOT-RE	UN GHS 3 • No data available OSHA HCS 2012 • No data available WHMIS 2015 • No data available

Potential Health Effects

Inhalation

Acute (Immediate)

 Under normal conditions of use, no health effects are expected. Inhalation of dust may cause mild irritation to mucous membranes, nose and throat. Symptoms may include coughing, dryness and sore throat.

Chronic (Delayed)

No data available.

Skin

Acute (Immediate)

• Under normal conditions of use, no health effects are expected.

Chronic (Delayed)

No data available.

Eye

Acute (Immediate)

 Based upon practical use and experience using this product eye irritation is not expected to occur.

Chronic (Delayed)

No data available.

Ingestion

Acute (Immediate)

Ingestion may cause the following symptoms - diarrhea.

Chronic (Delayed)

No data available.

Key to abbreviations

LD = Lethal Dose

Section 12 - Ecological Information

Toxicity

· Material data lacking.

Persistence and degradability

· Material data lacking.

Bioaccumulative potential

Material data lacking.

Mobility in Soil

· Material data lacking.

Results of PBT and vPvB assessment

• No PBT and vPvB assessment has been conducted.

Other adverse effects

· No studies have been found.

Section 13 - Disposal Considerations

Waste treatment methods

Product waste

 Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste

 Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	UN number	UN proper shipping name	Transport hazard class (es)	Packing group	Environmental hazards
DOT	Not Applicable	Not Regulated	Not Applicable	Not Applicable	NDA
TDG	Not Applicable	Not Regulated	Not Applicable	Not Applicable	NDA
IMO/IMDG	Not Applicable	Not Regulated	Not Applicable	Not Applicable	NDA
IATA/ICAO	Not Applicable	Not Regulated	Not Applicable	Not Applicable	NDA

Special precautions for user

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

None specified.

No data available

Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture SARA Hazard Classifications • None

State Right To Know				
Component	CAS	MA	NJ	PA
Anionic Surfactant	Proprietary	No	No	No
Anionic Surfactant	Proprietary	No	No	No
Citrates	Proprietary	No	No	No
Sodium chloride	7647-14-5	No	No	No
Anionic Surfactant	Proprietary	Yes	No	Yes

Inventory						
Component	CAS	Canada DSL	Canada NDSL	EU EINECS	EU ELNICS	TSCA
Anionic Surfactant	Proprietary	Yes	No	Yes	No	Yes
Anionic Surfactant	Proprietary	Yes	No	Yes	No	Yes
Citrates	Proprietary	Yes	No	Yes	No	Yes
Sodium chloride	7647-14-5	Yes	No	Yes	No	Yes
Anionic Surfactant	Proprietary	Yes	No	Yes	No	Yes

Anionic Surfactant

Canada - WHMIS 1988 - Classifications of Substances

Canada Labor—

Anionic Surfactant	Proprietary	according to WHMIS classification criteria
		Uncontrolled product
Sodium chloride	7647-14-5	according to WHMIS classification criteria
Citrates	Proprietary	Not Listed
Anionic Surfactant	Proprietary	Not Listed
Anionic Surfactant	Proprietary	Not Listed
Canada - WHMIS 1988 - Ingredient Disclosure List		
Anionic Surfactant	Proprietary	Not Listed
Sodium chloride	7647-14-5	Not Listed
• Citrates	Proprietary	Not Listed
Anionic Surfactant	Proprietary	Not Listed
Anionic Surfactant	Proprietary	Not Listed
Environment		
Canada - CEPA - Priority Substances List		N. C. C. C.
Anionic Surfactant	Proprietary	Not Listed
Sodium chloride	7647-14-5	Not Listed
• Citrates	Proprietary	Not Listed
Anionic Surfactant	Proprietary	Not Listed
Anionic Surfactant	Proprietary	Not Listed
Europe		
Other		
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification		
Anionic Surfactant	Proprietary	Not Listed
Sodium chloride	7647-14-5	Not Listed
• Citrates	Proprietary	Not Listed
Anionic Surfactant	Proprietary	Not Listed
Anionic Surfactant	Proprietary	Not Listed
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Concentration		
Anionic Surfactant	Proprietary	Not Listed
Sodium chloride	7647-14-5	Not Listed
• Citrates	Proprietary	Not Listed
Anionic Surfactant	Proprietary	Not Listed
Anionic Surfactant	Proprietary	Not Listed
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling		
Anionic Surfactant	Proprietary	Not Listed
Sodium chloride	7647-14-5	Not Listed
Citrates	Proprietary	Not Listed
Anionic Surfactant	Proprietary	Not Listed
Anionic Surfactant	Proprietary	Not Listed
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substa		
Anionic Surfactant	Proprietary	Not Listed
Sodium chloride	7647-14-5	Not Listed

Uncontrolled product

according to WHMIS

Proprietary

• Citrates	Proprietary	Not Listed	
Anionic Surfactant	Proprietary	Not Listed	
Anionic Surfactant	Proprietary	Not Listed	
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases			
Anionic Surfactant	Proprietary	Not Listed	
Sodium chloride	7647-14-5	Not Listed	
Citrates	Proprietary	Not Listed	
Anionic Surfactant	Proprietary	Not Listed	
Anionic Surfactant	Proprietary	Not Listed	

United States

U.S OSHA - Process Safety Management - Highly Haz • Anionic Surfactant	Proprietary	Not Listed
Sodium chloride	7647-14-5	Not Listed
Citrates	Proprietary	Not Listed
Anionic Surfactant	Proprietary	Not Listed
Anionic Surfactant	Proprietary	Not Listed
U.S OSHA - Specifically Regulated Chemicals		
Anionic Surfactant	Proprietary	Not Listed
Sodium chloride	7647-14-5	Not Listed
Citrates	Proprietary	Not Listed
Anionic Surfactant	Proprietary	Not Listed
Anionic Surfactant	Proprietary	Not Listed
Environment		
U.S CAA (Clean Air Act) - 1990 Hazardous Air Polluta		
Anionic Surfactant	Proprietary	Not Listed
Sodium chloride	7647-14-5	Not Listed
Citrates	Proprietary	Not Listed
Anionic Surfactant	Proprietary	Not Listed
Anionic Surfactant	Proprietary	Not Listed
U.S CERCLA/SARA - Hazardous Substances and thei	· ·	
Anionic Surfactant	Proprietary	Not Listed
Sodium chloride	7647-14-5	Not Listed
Citrates	Proprietary	Not Listed
Anionic Surfactant	Proprietary	Not Listed
Anionic Surfactant	Proprietary	Not Listed
U.S CERCLA/SARA - Radionuclides and Their Reporta	able Quantities	
Anionic Surfactant	Proprietary	Not Listed
Sodium chloride	7647-14-5	Not Listed
Citrates	Proprietary	Not Listed
Anionic Surfactant	Proprietary	Not Listed
Anionic Surfactant	Proprietary	Not Listed
U.S CERCLA/SARA - Section 302 Extremely Hazardou		
Anionic Surfactant	Proprietary	Not Listed

Sodium chloride

Anionic Surfactant

Citrates

Not Listed

Not Listed

Not Listed

7647-14-5

Proprietary

Proprietary

Anionic Surfactant	Proprietary Not	Listed
U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances	ΓPQs	
Anionic Surfactant	Proprietary Not	Listed
Sodium chloride	7647-14-5 Not	Listed
• Citrates	Proprietary Not	Listed
Anionic Surfactant	Proprietary Not	Listed
Anionic Surfactant	Proprietary Not	Listed
U.S CERCLA/SARA - Section 313 - Emission Reporting		
Anionic Surfactant	<i>Proprietary</i> Not	Listed
Sodium chloride	7647-14-5 Not	Listed
• Citrates	Proprietary Not	Listed
Anionic Surfactant	Proprietary Not	Listed
Anionic Surfactant	Proprietary Not	Listed
U.S CERCLA/SARA - Section 313 - PBT Chemical Listing		
Anionic Surfactant	<i>Proprietary</i> Not	Listed
Sodium chloride	7647-14-5 Not	Listed
• Citrates	Proprietary Not	Listed
Anionic Surfactant	Proprietary Not	Listed
Anionic Surfactant	Proprietary Not	Listed

United States - California

Environment U.S California - Proposition 65 - Carcinogens List			
Anionic Surfactant	Proprietary	Not Listed	
Sodium chloride	7647-14-5	Not Listed	
• Citrates	Proprietary	Not Listed	
Anionic Surfactant	Proprietary	Not Listed	
Anionic Surfactant	Proprietary	Not Listed	
U.S California - Proposition 65 - Developmental Toxicity			
Anionic Surfactant	Proprietary	Not Listed	
Sodium chloride	7647-14-5	Not Listed	
• Citrates	Proprietary	Not Listed	
Anionic Surfactant	Proprietary	Not Listed	
Anionic Surfactant	Proprietary	Not Listed	
U.S California - Proposition 65 - Maximum Allowable Dose Levels (MAI	DL)		
Anionic Surfactant	Proprietary	Not Listed	
Sodium chloride	7647-14-5	Not Listed	
• Citrates	Proprietary	Not Listed	
Anionic Surfactant	Proprietary	Not Listed	
Anionic Surfactant	Proprietary	Not Listed	
U.S California - Proposition 65 - No Significant Risk Levels (NSRL)			
Anionic Surfactant	Proprietary	Not Listed	
Sodium chloride	7647-14-5	Not Listed	
• Citrates	Proprietary	Not Listed	
Anionic Surfactant	Proprietary	Not Listed	
Anionic Surfactant	Proprietary	Not Listed	
U.S California - Proposition 65 - Reproductive Toxicity - Female			
Anionic Surfactant	Proprietary	Not Listed	

Sodium chloride	7647-14-5	Not Listed
Citrates	Proprietary	Not Listed
Anionic Surfactant	Proprietary	Not Listed
Anionic Surfactant	Proprietary	Not Listed
J.S California - Proposition 65 - Reproductive Toxicity -	Male	
Anionic Surfactant	Proprietary	Not Listed
Sodium chloride	7647-14-5	Not Listed
Citrates	Proprietary	Not Listed
Anionic Surfactant	Proprietary	Not Listed
	Proprietary	Not Listed

United States - Pennsylvania

Labor		
U.S Pennsylvania - RTK (Right to Know) - Environm	ental Hazard List	
Anionic Surfactant	Proprietary	(solution)
Sodium chloride	7647-14-5	Not Listed
Citrates	Proprietary	Not Listed
Anionic Surfactant	Proprietary	Not Listed
Anionic Surfactant	Proprietary	Not Listed
U.S Pennsylvania - RTK (Right to Know) - Special H	azardous Substances	
Anionic Surfactant	Proprietary	Not Listed
Sodium chloride	7647-14-5	Not Listed
Citrates	Proprietary	Not Listed
Anionic Surfactant	Proprietary	Not Listed
Anionic Surfactant	Proprietary	Not Listed

Chemical Safety Assessment

No Chemical Safety Assessment has been carried out.

Section 16 - Other Information

Revision Date

Preparation Date

Disclaimer/Statement of Liability

- 02/March/2017
- 03/January/2017
- · The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. It is the responsibility of the user to comply with all applicable federal, state, and local laws and regulations. Nothing contained herein is to be construed as a recommendation for use in violation of any patents or of applicable laws or regulations.

Key to abbreviations NDA = No data available

Preparation Date: 03/January/2017

Format: GHS Language: English (US) UN GHS Revision 3, OSHA HCS 2012, WHMIS 2015 Revision Date: 02/March/2017 Page 11 of 11