

**MORTON SALT, INC.**

A K+S Group Company

**Safety Data Sheet****Section 1: Identification of the Substance/Mixture and of the Company/Undertaking****1.1 Product identifier**

- Product Name** • **USP Potassium Chloride**
- Synonyms** • Potassium Chloride;
- SDS Number/Grade** • G4000

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

- Relevant identified use(s)** • Food, Chemical and Drug Processing; – See product data sheets for more information

**1.3 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

**1.4 Emergency telephone number**

- Manufacturer** • 312-807-2000

**Section 2: Hazards Identification****EU/EEC**

According to Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 453/2010]  
According to EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD)

**2.1 Classification of the substance or mixture**

- CLP** • Not classified
- DSD/DPD** • Not classified

**2.2 Label Elements**

- CLP**
- Hazard statements** • No label element(s) specifically required
- DSD/DPD**
- Risk phrases** • No label element(s) specifically required

**2.3 Other Hazards**

- CLP** • According to Regulation (EC) No. 1272/2008 (CLP) this material is not considered hazardous.
- DSD/DPD** • According to European Directive 1999/45/EC this preparation is not considered dangerous.

**United States (US)**

According to OSHA 29 CFR 1910.1200 HCS

**2.1 Classification of the substance or mixture**OSHA HCS 2012 

- Not classified

**2.2 Label elements**

OSHA HCS 2012

**Hazard statements**

- No label element(s) specifically required

**2.3 Other hazards**

OSHA HCS 2012

- This product is not considered hazardous under the U.S. OSHA 29 CFR 1910.1200 Hazard Communication Standard.

**Canada**

According to WHMIS

**2.1 Classification of the substance or mixture**WHMIS 

- Not classified

**2.2 Label elements**

WHMIS

- No label element(s) specifically required

**2.3 Other hazards**

WHMIS

- In Canada, the product mentioned above is not considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

**Section 3 - Composition/Information on Ingredients****3.1 Substances**

Composition					
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comments
Potassium chloride	CAS:7447-40-7 EC Number:231-211-8	> 99%	Ingestion/Oral-Rat LD50 • 2600 mg/kg	EU DSD/DPD: Not classified EU CLP: Not classified OSHA HCS 2012: Not classified	NDA

**3.2 Mixtures**

- Material does not meet the criteria of a mixture in accordance with Regulation (EC) No 1272/2008.

**Section 4 - First Aid Measures****4.1 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.

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

- Refer to Section 11 - Toxicological Information.

#### 4.3 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 - Firefighting Measures

### 5.1 Extinguishing media

- Suitable Extinguishing Media**
- Material is non-combustible. In case of fire use media as appropriate for surrounding fire.
- Unsuitable Extinguishing Media**
- No data available.

### 5.2 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

### 5.3 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

### 6.1 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.

### 6.2 Environmental precautions

- None expected to be necessary if material is used under ordinary conditions and as recommended.

### 6.3 Methods and material for containment and cleaning up

- Containment/Clean-up Measures**
- Carefully shovel or sweep up spilled material and place in suitable container.

### 6.4 Reference to other sections

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

## Section 7 - Handling and Storage

### 7.1 Precautions for safe handling

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

## 7.2 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.

## 7.3 Specific end use(s)

• Refer to Section 1.2 - Relevant identified uses.

# Section 8 - Exposure Controls/Personal Protection

## 8.1 Control parameters

**Exposure Limits/Guidelines** • No applicable exposure limits available for product or components.

## 8.2 Exposure controls

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

### Personal Protective Equipment

#### Pictograms



#### 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.

# Section 9 - Physical and Chemical Properties

## 9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Solid	Appearance/Description	White crystalline solid with no odor.
Color	White	Odor	Odorless
Particulate Size	Variable	Odor Threshold	Data lacking
General Properties			
Boiling Point	Data lacking	Melting Point	Data lacking
Decomposition Temperature	Data lacking	pH	7 (Approximately)
Specific Gravity/Relative Density	1.987 Water=1	Water Solubility	34 g/100 cc water at 20°C (68°F)
Viscosity	Data lacking	Explosive Properties	Data lacking
Oxidizing Properties:	Data lacking		
Volatility			
Vapor Pressure	Data lacking	Vapor Density	Data lacking
Evaporation Rate	Data lacking		
Flammability			

Flash Point	Not relevant	UEL	Not relevant
LEL	Not relevant	Heat of Combustion ( $\Delta H_c$ )	Data lacking
Flammability (solid, gas)	Data lacking		
<b>Environmental</b>			
Octanol/Water Partition coefficient	Data lacking		

## 9.2 Other Information

- No additional physical and chemical parameters noted.

## Section 10: Stability and Reactivity

### 10.1 Reactivity

- No dangerous reaction known under conditions of normal use.

### 10.2 Chemical stability

- Stable

### 10.3 Possibility of hazardous reactions

- Hazardous polymerization will not occur.

### 10.4 Conditions to avoid

- Incompatible materials.

### 10.5 Incompatible materials

- Strong oxidizing agents, strong acids.

### 10.6 Hazardous decomposition products

- Will react with strong acids to generate hydrogen chloride and with strong oxidizing agents to generate chlorine gas.

## Section 11 - Toxicological Information

### 11.1 Information on toxicological effects

USP Potassium Chloride								
Test Type	Dosage	Route	Species	Duration	Results	Test Class	Target Organs	Comments
Acute Toxicity	= 2600 mg/kg	Ingestion/Oral	Rat	NDA	LD50	NDA	NDA	NDA
Irritation	= 500 mg	Eye	Rabbit	24 Hour(s)	NDA	Mild irritation	NDA	NDA
GHS Properties				Classification				
Acute toxicity				EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met				
Aspiration Hazard				EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met				
Carcinogenicity				EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met				
Germ Cell Mutagenicity				EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met				
Skin corrosion/Irritation				EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met				

<b>Skin sensitization</b>	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
<b>STOT-RE</b>	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
<b>STOT-SE</b>	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
<b>Toxicity for Reproduction</b>	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
<b>Respiratory sensitization</b>	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
<b>Serious eye damage/Irritation</b>	EU/CLP • Eye Irritation 2 OSHA HCS 2012 • Eye Irritation 2

**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**

**12.1 Toxicity**

- Material data lacking.

**12.2 Persistence and degradability**

- Material data lacking.

**12.3 Bioaccumulative potential**

- Material data lacking.

**12.4 Mobility in Soil**

- Material data lacking.

**12.5 Results of PBT and vPvB assessment**

- No PBT and vPvB assessment has been conducted.

## 12.6 Other adverse effects

- No studies have been found.

## Section 13 - Disposal Considerations

### 13.1 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

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	NDA	Not Regulated	NDA	NDA	NDA
TDG	NDA	Not Regulated	NDA	NDA	NDA
IMO/IMDG	NDA	Not Regulated	NDA	NDA	NDA
IATA/ICAO	NDA	Not Regulated	NDA	NDA	NDA

**14.6 Special precautions for user**

- None known.

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

- Not relevant.

## Section 15 - Regulatory Information

### 15.1 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
Potassium chloride	7447-40-7	No	No	No

Inventory						
Component	CAS	Canada DSL	Canada NDSL	China	EU EINECS	EU ELNICS
Potassium chloride	7447-40-7	Yes	No	Yes	Yes	No

Inventory (Con't.)		
Component	CAS	TSCA
Potassium chloride	7447-40-7	Yes

## Canada

**Labor**

Canada - WHMIS - Classifications of Substances

Uncontrolled product

• Potassium chloride	7447-40-7	according to WHMIS classification criteria (including 23.8%)
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**Canada - WHMIS - Ingredient Disclosure List**

• Potassium chloride	7447-40-7	Not Listed
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**Environment****Canada - 2004 NPRI (National Pollutant Release Inventory)**

• Potassium chloride	7447-40-7	Not Listed
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**Canada - 2005 NPRI (National Pollutant Release Inventory)**

• Potassium chloride	7447-40-7	Not Listed
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**Canada - CEPA - Greenhouse Gases Subject to Mandatory Reporting**

• Potassium chloride	7447-40-7	Not Listed
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**Canada - CEPA - Priority Substances List**

• Potassium chloride	7447-40-7	Not Listed
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**Canada - DWQ (Drinking Water Quality) - IMACs**

• Potassium chloride	7447-40-7	Not Listed
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**Other****Canada - Accelerated Reduction/Elimination of Toxics (ARET)**

• Potassium chloride	7447-40-7	Not Listed
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**Canada New Brunswick****Environment****Canada - New Brunswick - Ozone Depleting Substances - Schedule A**

• Potassium chloride	7447-40-7	Not Listed
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**Canada - New Brunswick - Ozone Depleting Substances - Schedule B**

• Potassium chloride	7447-40-7	Not Listed
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**Europe****Other****EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification**

• Potassium chloride	7447-40-7	Not Listed
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**EU - CLP (1272/2008) - Annex VI - Table 3.2 - Concentration Limits**

• Potassium chloride	7447-40-7	Not Listed
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**EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling**

• Potassium chloride	7447-40-7	Not Listed
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**EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substances and Preparations**

• Potassium chloride	7447-40-7	Not Listed
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**EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases**

• Potassium chloride	7447-40-7	Not Listed
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**Mexico**



**Other****Mexico - Hazard Classifications**

• Potassium chloride	7447-40-7	Not Listed
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**Mexico - Regulated Substances**

• Potassium chloride	7447-40-7	Not Listed
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**United States****Labor****U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals**

• Potassium chloride	7447-40-7	Not Listed
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**U.S. - OSHA - Specifically Regulated Chemicals**

• Potassium chloride	7447-40-7	Not Listed
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**Environment****U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants**

• Potassium chloride	7447-40-7	Not Listed
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**U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities**

• Potassium chloride	7447-40-7	Not Listed
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**U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities**

• Potassium chloride	7447-40-7	Not Listed
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**U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs**

• Potassium chloride	7447-40-7	Not Listed
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**U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs**

• Potassium chloride	7447-40-7	Not Listed
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**U.S. - CERCLA/SARA - Section 313 - Emission Reporting**

• Potassium chloride	7447-40-7	Not Listed
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**U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing**

• Potassium chloride	7447-40-7	Not Listed
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**United States - California****Environment****U.S. - California - Proposition 65 - Carcinogens List**

• Potassium chloride	7447-40-7	Not Listed
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**U.S. - California - Proposition 65 - Developmental Toxicity**

• Potassium chloride	7447-40-7	Not Listed
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**U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)**

• Potassium chloride	7447-40-7	Not Listed
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**U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)**

• Potassium chloride	7447-40-7	Not Listed
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**U.S. - California - Proposition 65 - Reproductive Toxicity - Female**

• Potassium chloride	7447-40-7	Not Listed
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**U.S. - California - Proposition 65 - Reproductive Toxicity - Male**

• Potassium chloride	7447-40-7	Not Listed
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**United States - Pennsylvania****Labor****U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List**

• Potassium chloride	7447-40-7	Not Listed
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**U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances**

• Potassium chloride	7447-40-7	Not Listed
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**15.2 Chemical Safety Assessment**

- No Chemical Safety Assessment has been carried out.

**Section 16 - Other Information****Last Revision Date**

- No data available

**Preparation Date**

- No data available

**Disclaimer/Statement of Liability**

- 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