

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 mixtureOSHA HCS 2012

- Not classified

2.2 Label elementsOSHA HCS 2012
Hazard statements

- No label element(s) specifically required

2.3 Other hazardsOSHA 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 mixtureWHMIS

- Not classified

2.2 Label elementsWHMIS

- No label element(s) specifically required

2.3 Other hazardsWHMIS

- 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 (ΔH_c)	Data lacking
Flammability (solid, gas)	Data lacking		
Environmental			
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					

Skin sensitization	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
STOT-RE	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
STOT-SE	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Toxicity for Reproduction	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Respiratory sensitization	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Serious eye damage/Irritation	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%)
Canada - WHMIS - Ingredient Disclosure List		
• Potassium chloride	7447-40-7	Not Listed

Environment		
Canada - 2004 NPRI (National Pollutant Release Inventory)		
• Potassium chloride	7447-40-7	Not Listed
Canada - 2005 NPRI (National Pollutant Release Inventory)		
• Potassium chloride	7447-40-7	Not Listed
Canada - CEPA - Greenhouse Gases Subject to Mandatory Reporting		
• Potassium chloride	7447-40-7	Not Listed
Canada - CEPA - Priority Substances List		
• Potassium chloride	7447-40-7	Not Listed
Canada - DWQ (Drinking Water Quality) - IMACs		
• Potassium chloride	7447-40-7	Not Listed

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

Canada New Brunswick

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

Europe

Other		
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification		
• Potassium chloride	7447-40-7	Not Listed
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Concentration Limits		
• Potassium chloride	7447-40-7	Not Listed
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling		
• Potassium chloride	7447-40-7	Not Listed
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substances and Preparations		
• Potassium chloride	7447-40-7	Not Listed
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases		
• Potassium chloride	7447-40-7	Not Listed

Mexico

Other

Mexico - Hazard Classifications

• Potassium chloride 7447-40-7 Not Listed

Mexico - Regulated Substances

• Potassium chloride 7447-40-7 Not Listed

United States

Labor

U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals

• Potassium chloride 7447-40-7 Not Listed

U.S. - OSHA - Specifically Regulated Chemicals

• Potassium chloride 7447-40-7 Not Listed

Environment

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants

• Potassium chloride 7447-40-7 Not Listed

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

• Potassium chloride 7447-40-7 Not Listed

U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities

• Potassium chloride 7447-40-7 Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

• Potassium chloride 7447-40-7 Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

• Potassium chloride 7447-40-7 Not Listed

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

• Potassium chloride 7447-40-7 Not Listed

U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing

• Potassium chloride 7447-40-7 Not Listed

United States - California

Environment

U.S. - California - Proposition 65 - Carcinogens List

• Potassium chloride 7447-40-7 Not Listed

U.S. - California - Proposition 65 - Developmental Toxicity

• Potassium chloride 7447-40-7 Not Listed

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

• Potassium chloride 7447-40-7 Not Listed

U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)

• Potassium chloride 7447-40-7 Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Female

• Potassium chloride 7447-40-7 Not Listed

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