



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.
444W. Lake St
Chicago, IL 60606 United States

www.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-	> 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

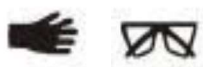
Exposure Limits/Guidelines No applicable exposure limits available for product or components.

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 safetyglasses.

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	EUEINECS	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

Preparation
Revision Date:

• 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

United States - Pennsylvania**Labor****U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List**

• Potassium chloride

7447-40-7

Not Listed

U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances

• Potassium chloride

7447-40-7

Not Listed

15.2 Chemical Safety Assessment

- No Chemical Safety Assessment has been carried out.

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

2021/May/27

Preparation Date

2014/January/04

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