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SAFETY DATA SHEET

Potassium Chloride

Section 1. Identification

GHS product identifier : Potassium Chloride; Muriate of Potash (MOP)
Product type : solid

Uses

Area of application : Not Applicable

Supplier

Supplier's details : Greenway Biotech, Inc.

Address

Street : 10632 Painter Ave
Postal code : 90670
City : Santa Fe Springs
Country : United States

Telephone number : +1 562-351-5168

e-mail address of person responsible for this SDS : sales@greenwaybiotech.com

Emergency telephone number (with hours of operation) : US: Chemtrec 24-hours Emergency Response: 1-800-424-9300
Canada: 24 Hour Emergency Service, (Canutec 613-996-6666)

National advisory body/Poison Center

Name : The National Poisons Emergency number
Telephone number : 1 800 222 1222

Section 2. Hazards identification

GHS Classification : Not applicable
Signal Word : Not applicable
Prevention : Not applicable
Response : Not applicable
Storage : Not applicable
Disposal : Not applicable

Other Hazards which do not require classifications : Handling and/or processing of this material may generate dust which can cause mechanical irritation of the eyes, skin, nose and throat

Section 3. Composition/information on ingredients

Formula	KCl			
Composition	Potassium Chloride Sodium Chloride	CAS 7447-40-7 CAS 7647-14-5	95- 99.5% 0.3-3.7%	Eye irritant category 2B

Section 4. First aid measures

Inhalation: If respiratory symptoms develop, move victim away from source of exposure and into fresh air. If symptoms persist, seek medical attention.

Skin contact: Wash contaminated area thoroughly with mild soap and water. If chemical or solution soaks through clothing, remove clothing and wash contaminated skin. If irritation develops and persists after washing, seek medical attention.

Eye contact: Move victim away from exposure and into fresh air. Flush eyes with plenty of clean water for at least 15 minutes. If symptoms persist, seek medical attention.

Ingestion: If large amounts are swallowed, seek emergency medical attention. If possible do not leave victim unattended and observe closely for adequacy of breathing.

Notes to physician: None known

Section 5. Fire Fighting Measures

Extinguishing Media: Use extinguishing agent suitable for type of surrounding fire.

Protection of Firefighters: No unusual fire or explosion hazards are expected. When this material is subject to high temperatures, it may release small amounts of chloride gas. Positive pressure self-contained breathing apparatus is required for all firefighting activities involving hazardous materials. Full structural firefighting (bunker) gear is the minimum accepted attire. The need for proximity, entry, flashover and/or special chemical protective clothing (see section 8) needs to be determined for each incident by a competent firefighting safety professional. Water used for fire suppression and cooling may become contaminated. Discharge to sewer system(s) or the environment may be restricted, requiring containment and proper disposal of water (see section 6).

Section 6. Accidental release measures

Response Techniques: Stay upwind and away from spill (dust hazard). Wear appropriate protective equipment, including respiratory protection, as conditions warrant (see section 8). Prevent spilled material from entering sewers, storm drains, other unauthorized treatment drainage systems, and natural waterways. Notify appropriate federal, state and local agencies as may be required (see section

15). Minimize dust generation. Sweep up and package appropriately for disposal. Large spills can kill or harm vegetation.

Section 7. Handling and storage

Handling: The use of appropriate respiratory protection is advised when concentrations exceed any established exposure limits (see Section 8). Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Wash contaminated clothing or shows. Use good personal hygiene practices.

Storage: Use and store this material in dry, well-ventilated areas. Store only in approved containers. Keep container(s) tightly closed. Keep away from any incompatible material (see section 10). Protect container(s) against physical damage. Material may absorb moisture from the air.

Section 8. Exposure controls / personal protection

Engineering Controls: Use process enclosure, general dilution ventilation or local exhaust systems where necessary to maintain airborne dust concentration below the OSHA standards or in accordance with applicable regulations.

Eye/Face: Approved eye protection to safeguard against potential eye contact, irritation, or injury is recommended.

Skin: The use of cloth or leather work gloves is advised to prevent skin contact, possible irritation and absorption.

Respiratory: A NIOSH approved air purifying respirator with a type 95 (R or P) particulate filter may be used under conditions where airborne concentrations are expected to exceed exposure limits. Protection provide by air purifying respirators is limited (see manufacturer's respirator selection guide). Use a positive pressure air supplied respirator if there is potential for uncontrolled release, exposure levels are not known or any other circumstances where air purifying respirators may not provide adequate protection. A respiratory protection program that meets OSHA's 29 CFR 1910. 134 and ANSI Z88.2 requirements must be followed if workplace conditions warrant a respirator.

Other: A source of clean water should be available in the work are for flushing eyes and skim. Impervious clothing should be worn as needed.

General Hygiene Considerations: Wash thoroughly after handling. Use adequate ventilation.

OSHA Permissible Exposure limits (PEL):

Particulates not otherwise regulated:

5 mg/m³TWA (respirable)

15 mg/m³ TWA (total)

ACGIH Threshold Limit Value (TLV):

Particulates Not Otherwise Specified:

3 mg/m³ TWA(respirable);

10 mg/m³ TWA (inhalable)

Section 9. Physical and chemical properties

Appearance : White to reddish brown, crystalline or granular

Odor	:	None/Strong saline
Odor threshold	:	No data available
physical state	:	Solid
pH	:	5.4 – 10.0 in a 5% solution
Melting point	:	772 to 776°C (1423 to 1428°F)
Boiling point	:	Sublimes at 1500°C (2732°F)
Flash point	:	Not applicable
Evaporation rate	:	No data availability
Flammability	:	Not applicable
Upper/ lower flammability	:	Not applicable
Vapor Pressure (mm Hg)	:	Not applicable
Vapor density (air=1)	:	Not applicable
Specific gravity or relative density	:	1.986 – 1.990
Bulk density	:	Loose 64 – 75 lbs/ft ³ (1025 – 1200 kg/m ³);
Solubility in water	:	99.5 – 99.999%; 34.2 g/100mL at 20°C
partition coefficient	:	No data available
Auto ignition temperature	:	Not applicable
Decomposition temperature	:	No data available
Viscosity	:	No data available
volatility	:	Not applicable

Section 10. Stability and Reactivity

Chemical Stability: Stable under normal conditions of storage and handling. Material is hygroscopic (May absorb moisture from air when relative humidity > 72%).

Conditions to avoid: None known

Incompatibility Materials: Strong oxidizing agents, strong acids

Hazardous Decomposition: None known

Corrosiveness: Similar to salt. Mildly corrosive to metals in the presence of moisture.

Hazardous Polymerization: Will not occur

Section 11. Toxicological information

Substance	:	Potassium Chloride
Acute Oral Toxicity	:	LD50 (rat, oral) > 2600 mg/kg LD50 (mouse, oral) > 1500 mg/kg
Acute Inhalation Toxicity	:	No data available
Acute Dermal Toxicity	:	No data available
Substance	:	Sodium Chloride
Acute Oral Toxicity	:	LD50 (rat, oral) > 3000 mg/kg LD50 (mouse, oral) > 4000 mg/kg
Acute Inhalation Toxicity	:	LC50 (rat) > 42 g/m ³ / 1 hour
Acute Dermal Toxicity	:	No data available
Mutagenesis	:	No data available
Target Organ	:	No data available
Developmental Toxicity	:	No data available
Carcinogenicity	:	No data available

Section 12. Ecological Information

Ecotoxicology: Dissolution of large quantities of potassium chloride and sodium chloride in water may create an elevated level of salinity that may be harmful to fresh water aquatic species and to plants that are not salt-tolerant.

Potassium Chloride:

Lepomis macrochirus LC50 - 2010 mg/l
Physa heterostrapha LC50 - 940 mg/l
Scenedesmus subspicatus EC50 - 2500 mg/l
Sodium Chloride:
Ceriodaphnia dubia LC50 - 280,000 - 3,540,000 ug/l
Daphnia magna LC50 - 3,144,000 - 10,000,000 ug/l
Daphnia pulex EC50 - 56.40 mM
Pimephales promelas LD50 - 6,020,000 - 10,000,000 ug/l

Section 13. Disposal Considerations

This material, if discarded as produced is not an RCRA "listed or "characteristic" hazardous waste. Contamination may subject it to hazardous waste regulations. It is the generator's responsibility to properly characterize all waste materials. Consult federal, state/provincial and local regulations regarding the proper disposal of this material.

Section 14. Transportation Information

Regulatory Status	:	Not regulated
Identification Number	:	HTS 3104.20.00
Hazard Class	:	Not applicable
Proper Shipping	:	Name Not applicable
Packing Group	:	Not applicable
DOT Emergency Response	:	
Guide Number	:	Not applicable
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	:	Not applicable
MARPOL Annex V	:	Non-HME
IMO/IMDG	:	Not applicable

Section 15. Regulatory information

CERCLA: Not listed

RCRA 261.33: Not listed

SARA TITLE III: (Exemptions at 40 CFR, Part 370 may apply for agricultural use, or for quantities of less than 10,000 pounds on-site.)

Section 302/304: Not listed

RQ: No

TPQ: No

Section 311/312

Acute: No

Chronic: No

Fire: No

Pressure: No

Reactivity: No

Section 313: Not listed

NTP, IARC, OSHA: This material has not been identified as a carcinogen by NTP, IARC, or OSHA.

Canada DSL and NDSL: DSL: Yes NDSL: Not listed

TSCA: Listed on the TSCA Inventory

CA Proposition 65: (Health & Safety Code Section 25249.5) WARNING: Cancer and Reproductive

Section 16. Other information

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Preparation:

The preparation of this SDS was in accordance with ANSI Z400.1-2010.

Revision Date:

December 31, 2018

SDS Number:

MOS 100052

References:

Globally Harmonized System of Classification and Labelling of Chemicals (GHS) – 4th Edition 2011
OSHA Hazard Communication Standard, 2012
MARPOL Annex V; The Fertilizer Institute (TFI), 2003; TOXNET
Toxline, Tomes, ECHA, OECD SIDS