

Safety Data Sheet

Section 1: Identification

Common Name: Standard Potash

Formula: KCl

Synonyms: Muriate of Potash

Primary Use: Feed and Fertilizer

Company Identification:

Origination, LLC
1802 Wooddale Drive, Suite 200
Woodbury, MN 55125

For information, call: 1-800-625-6079


Emergency Number: 1-800-625-6079

For CHEMTREC assistance, call: 1-800-424-9300


For International CHEMTREC assistance, call: 703-527-3887

Section 2: Hazard(s) Identification

Classification of the substance or mixture

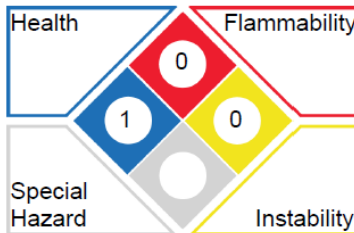
GHS07	Hazard	Category	Hazard Code	Health Hazard Statement
	Eye Irritation	2A	H319	Can cause serious eye irritation.
	Skin Irritation	3	H316	Can cause mild skin irritation.
	Respiratory Irritation	3	H335	May cause respiratory irritation.
	Ingestion	5	H303	May be harmful if swallowed

Label Elements

	Hazard Statements	H315 H320	Causes skin and eye irritation (especially in open wounds).
		H335	May cause respiratory irritation.
		H303	May be harmful if swallowed.
Signal Word: WARNING	Precautionary Statements	P280	Wear protective clothing (see Section VII).
		P305 P351 P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Potassium Chloride

NFPA



HMIS

Health	1
Flammability	0
Physical Hazard	0
Personal Protection	E

Carcinogenicity Lists:

IARC Monograph: No.

NTP: No.

OSHA: No.

Section 3: Composition / Information on Ingredients

Chemical Name(s)	CAS No.	Exposure Limits								
		OSHA PEL		TLV-TWA		STEL		CEIL		% by Weight
		mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	
Potassium Chloride	7447-40-7	15 / 5*		10**						95-99.8
Sodium Chloride	7647-14-5	15 / 5 *		10**						0.1-4

May contain up to 0.25% base lubrication oil and/or 0.03% neutralized primary aliphatic amines.

** Total Dust / Respirable dust

*Based on ACGIH nuisance dust limits.

Section 4: First Aid Measures

Eyes: Rinse cautiously with water for several minutes. Flush with water, including under upper & lower lids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention/advice if pain and Irritation persists.

Skin: Wash thoroughly with water. Obtain medical advice/attention if irritation persists.

Ingestion: A large body load may cause vomiting, diarrhea, cramps, tingling in hands and feet, weak pulse, and circulatory disturbances. Administer water if patient is conscious. Ingesting potash will usually cause purging of the stomach by vomiting. Get Medical attention.

Inhaled: If individual is experiencing respiratory discomfort or irritation. Remove to fresh air. If discomfort or irritation persists, get medical attention/advice.

Section 5: Fire Fighting Measures

Flash Point: None

Auto-ignition Temperature: Not Applicable

Lower Explosive Limit: Not Applicable.

Upper Explosive Limit: Not Applicable.

Unusual Fire and Explosion Hazards: When subjected to extremely high temperatures, it may release small quantities of chlorine gas.

Extinguishing Media: As required for surrounding fire. Potash is non-flammable and does not support combustion.

Special Firefighting Procedures and Equipment: Positive pressure, self-contained breathing apparatus is required for all firefighting activities involving hazardous materials. Full structural firefighting (bunker) gear is the minimum acceptable 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 environment may be restricted, requiring containment and proper disposal of water.

Section 6: Accidental Release Measures

Small Spill: Sweep up and use as fertilizer if non-contaminated.

Large Spill: Collect with appropriate equipment. If on a hard surface, sweep up residue with brooms. If on soil, remove and collect the top 5 cm of soil.

Release Notes: Potash is highly soluble and can be quickly diluted below the toxic level by relatively large amounts of water. Potash which has entered a small non-permanent pond should be removed by pumping the pond dry. If spill could potentially enter any waterway, including intermittent dry creeks, contact the local authorities. If in the U.S., contact the US COAST GUARD NATIONAL RESPONSE CENTER toll free number, 800-424-8802. In case of accident or road spill notify: CHEMTREC IN USA AT 800-424-9300; CANUTEC in Canada at 613-996-6666 CHEMTREC in other countries at (International code) +1-703-527-3887.

Comments: See Section XIII for disposal information and Section XV for regulatory requirements. Large and small spills may have a broad definition depending on the user's handling system. Therefore, the spill category must be defined at the point of release by technically qualified personnel

Section 7: Handling and Storage

Ventilation: Local exhaust to reduce dust concentrations below recommended levels.

Handling: Avoid generating dust by excessive or unnecessary movement.

Storage: Store in a dry location. Avoid contact with aluminum or carbon steel to minimize corrosion.

Section 8: Exposure Controls, Personal Protection

Engineering Controls: May be necessary to minimize dust levels.

Personal Protection:

Eye Protection: Use tight-fitting safety goggles in areas of high dust concentration.

Protective Clothing: Gloves, long sleeve shirts and long pants. Launder work clothing regularly.

Respiratory Protection: Minimum NIOSH approved N95 filter type dust respirators until engineering controls are implemented.

Other Protective Clothing or Equipment: Optional.

Section 9: Physical and Chemical Properties

Appearance/Color/Odor: White crystalline material with a slight oily odor.

Melting Point/Range: 778°C

Solubility in Water: 99.5 – 99.999% ; 34.2 g/100ml @20°C

Specific Gravity: 2.0 (H₂O = 1)

Vapor Density: Not Applicable.

Bulk Density: 70-72 lbs/ft³

pH: 8 – 9 (solution)

Viscosity: Not applicable.

Boiling Point: 1500°C (sublimates)

Boiling Point/Range: 1420 - 1500°C

Vapor Pressure (mmHg): Not Applicable.

Molecular Weight: 74

% Volatiles: < 0.5

Evaporation Rate: Not applicable.

Section 10: Stability and Reactivity

Stability: Stable.

Hazardous Polymerization: Will not occur.

Conditions to Avoid: None.

Materials to Avoid (Incompatibilities): Strong Oxidizing Agents, Strong Acids & Protect From Moisture.

Hazardous Decomposition Products: None.

Section 11: Toxicological Information

Significant Routes of Exposure: Eyes, skin, inhalation, ingestion.

Toxicity to Animals: Oral LD₅₀ (mouse, rat): 1500 – 2600 mg/kg

Acute Inhalation Toxicity: No data available.

Acute Toxicity: Other Routes: No data available.

Acute Dermal Toxicity: No data available.

Repeated Dose Toxicity: No data available.

Eye & Skin Irritation/Corrosion: No data available.

Special Remarks on Toxicity to Animals: Not expected to be toxic by dermal exposure as defined by OSHA.

Developmental Toxicity/Teratogenicity: No data available.

Bacterial Genetic Toxicity In-Vitro Gene Mutation: (*Saccaromyces cerevisiae*) - Mitotic recombination:

Potassium Chloride



NOAEL = 300 mM.

Non-Bacterial Genetic Toxicity In-Vitro Chromosomal Aberration: No data available

Toxicity to Reproduction: No data available

Carcinogenicity: No data available

Other Effects on Humans: Large doses by mouth can cause gastrointestinal irritation, purging, weakness and circulatory disturbances. Potassium chloride used as a dietary supplement in food for human consumption is generally recognized as safe (GRAS).

Special Remarks on Chronic Effects on Humans: Not reported to be carcinogenic mutagenic, teratogenic or allergenic.

Special Remarks on Other Effects on Humans: None.

Section 12: Ecological Information

Ecotoxicology

Acute Toxicity to Fish: 96 hour LC 50 (rainbow trout) 2010mg/L

Chronic Toxicity to Fish: No data available

Acute Toxicity to Aquatic Invertebrates: 48 hour EC50 (crustacean/daphnia) 337 mg/L (Physaheterostropha) - 96 hrs - LC50 = 940 mg/L.

Chronic Toxicity to Aquatic Invertebrates:

Toxicity to Aquatic Plants: 72 hour ErC 50 (aquatic plants) 2500 mg/L. NEOL (aquatic plants) 0.6 g/L. ((Nitzschia linearis)diatom) - 5 days- 120 hour TLM = 1,337 ppm KCl; (Scendesmus subspicatus) 72 hour - EC50 = 2,500 mg/L. (Chlorella vulgaris) - 3 – 4 months - NOEC = 600 mg KCl/L, LOEL = 700 mg KCl/L.

Toxicity to Bacteria: (activated sludge): No data available.

Toxicity to Soil Dwelling Organisms: No data available.

Toxicity to Terrestrial Plants: No data available.

Environmental Fate:

Stability in Water: Dissolves in water and disassociates into K and Cl ions. Ions may be absorbed by plants or by animals ingesting water containing potash.

Stability in Soil: Binds to clay particles.

Transport and Distribution: 1.51 x 10⁻⁸ % to air; 45.2% to water; 54.7% to soil; 0.0755% to sediment.

Toxicity: Non-toxic to aquatic organisms as defined by USEPA

Degradation: Chloride and potassium ions.

Section 13: Disposal Considerations (non-mandatory)

Product Disposal: Uncontaminated product may be used as fertilizer. Otherwise, dispose according to Federal State or Provincial regulations in a landfill approved to receive potash.

General Comments: Because of its solubility, potash should not be disposed of in a location where run-off will escape.

Section 14: Transport Information

	USDOT	TDG - Canada
Proper Shipping Name:	Not Regulated	Not Regulated
Hazard Class:		
Identification Number:		
Packing Group (Technical Name)		
Labeling/Placarding		
Authorized Packaging:		
Notes:		
European Transportation:		

Section 15: Regulatory Information

UNITED STATES:

SARA Hazard Category: This product has been reviewed according to the EPA Hazard Categories promulgated under Section 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Fire: No

Pressure Generating: No

Reactivity: No

Acute: No

Chronic: No

40 CFR Part 355 – Extremely Hazardous Substances:

40 CFR Part 370 – Hazardous Chemical Reporting:

All intentional ingredients listed on the TSCA inventory.

SARA Title III Information: This product contains the following substances subject to the reporting requirements of Title III(EPCRA) of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

Chemical	CAS No	Percent by Weight	CERCLA RQ (lbs.)	SARA (1986) Reporting		
				311	312	313
Potassium Chloride	7447-40-7	95-99.8	NA	No	No	No
Sodium Chloride	7647-14-5	0.1-4	NA	No	No	No

CERCLA/Superfund, 40 CFR Parts 117,302: If this product contains components subject to substances designated a **CERCLA Reportable Quantity (RQ) Substances**, it will be designated in the above table with the **RQ** value in pounds. If there is a release of **RQ Substance** to the environment, notification to the National Response Center, Washington D.C. (1-800-424-8802) is required.

CANADA:

Potassium Chloride



WHMIS Hazard Symbol and Classification: Not controlled

Ingredient Disclosure List: This product does not contain ingredient(s) on this list.

Environmental Protection: All intentional ingredients are listed on the DSL (Domestic Substance List).

Section 16: Additional Information

NFPA Hazard Rating:

Health: 1

Fire: 0

Reactivity: 0

Special Hazards

0 = Insignificant 1 = Slight 2 = Moderate 3 = High 4 = Extreme

Comments: None

Section(s) changed since last revision: SDS is designed to comply with U.S. DOL: OSHA and MSHA HazCom standards in effect on the revision date.

Prepared by: Origination, LLC

Prepared: January 25, 2022

Disclaimer:

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