Safety Data Sheet

Section 1: Identification

Product Name: Potash

Product Form: Inorganic Salt

Use of product: Crop Nutrient

Synonyms: MOP
Potassium Chloride
Potassium Muriate
Potassium Monochloride
Muriate of Potash

Produced by:
The Espoma Company
6 Espoma Road
Millville, NJ 08332

Emergency phone number: 800-634-0603

Section 2: Hazards Information

Contains no hazardous ingredients
Classification (GHS – US): Not classified
GHS – US Labeling: No labeling applicable
Other hazards: No additional information available
Unknown acute toxicity: No data available

Section 3: Composition / Information on Ingredients:

CAS #	Name	Concentration
CAS 7447-40-7	Potassium Chloride	95-99.5%
CAS 7647-14-5	Sodium Chloride	0.3-3.7%

**The exact percentage (concentration) of composition has been withheld as a trade secret.*

Section 4: First Aid Measures

Exposure	Symptoms	Recommendation
Inhalation	Mild Irritation	If respiratory symptoms develop, move victim away from source of exposure and into fresh air.

		If symptoms persist, seek medical attention.
Skin Contact	Mild Irritation	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	Mild Irritation	Move victim away from exposure into fresh air. Flush eyes with plenty of clean water for at least 15 minutes. If symptoms persist, seek medical attention.
Ingestion	Mild Irritation	If large amounts are swallowed, seek emergency medical attention. If possible, do not leave victim unattended and observe closely for adequacy of breathing.
Note to Physician	None Known	

No unusual procedures required.

Section 5: Fire-fighting Measures:

Extinguishing Media: Use fire extinguishing materials appropriate for surrounding fire.

Protection of Firefighters:

No unusual fire or explosion hazards are expected. When this material is subjected 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 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 the environment may be restricted, requiring containment and proper disposal of water (see Section 6).

Advice for Firefighters: If possible prevent runoff water from entering storm drains or bodies of water.

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 harm or kill vegetation.
If uncontaminated: Sweep up or collect, and reuse as product. If contaminated with other materials, collect in suitable containers.
WASTE DISPOSAL METHOD: Contaminated material can generally be disposed of in an approved disposal facility, in accordance with applicable federal, state, and local regulations.

Environmental Precautions: Prevent from entering storm drains or bodies of water.

Section 7: Handling & 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 shoes. 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.
Incompatible Materials: None known

Section 8: Exposure Controls / Personal Protection:

Exposure 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.
Personal Protective Equipment (PPE)
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 provided 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 area for flushing eyes and skin. Impervious clothing should be worn as needed.
Exposure Guidelines: OSHA Permissible Exposure Limit
General Hygiene Considerations: Wash thoroughly after handling Use adequate ventilation
Exposure Guidelines:

OSHA Permissible Exposure Limits (PEL):	Particulates Not Otherwise Regulated: 5 mg/m^3 TWA (respirable); 15 mg/m^3 TWA (total)
ACGIH Threshold Limit Value (TLV):	Particulates Not Otherwise Specified: 3 mg/m^3 TWA (respirable); 10 mg/m^3 TWA (inhalable)

Section 9: Physical & Chemical Properties:

Appearance	White to reddish-brown, crystalline or granular	**Boiling Point**	Sublimes at 1500°C (2732°F)
Odor	None/Strong Saline	**Bulk Density:**	Loose 64 - 75 lbs/ft^3 (1025 - 1200 kg/m^3)
Odor Threshold	No Data Available	**Flash Point**	Not applicable
Physical State:	Solid	**Flammability**	Not applicable
pH	5.4 – 10.0 in a 5% solution	**Vapor Pressure**	Not applicable
Melting Point/ Freezing Point	772 to 776°C (1423 to 1428°F)	**Decomposition Temperature:**	No data available
Evaporation Rate:	No Data Available	**Volatility:**	Not applicable
Solubility in Water: **Partition coefficient:**	99.5 - 99.999%; 34.2 g/100mL at 20°C No data available	**Viscosity** **Auto-Ignition Temperature:**	No data available Not applicable
Upper/lower Flammability or explosive limits	Not applicable		

Section 10: Stability & Reactivity:

Chemical Stability: Stable under normal conditions of storage and handling. Material is hygroscopic
(May absorb moisture from air when relative humidity >72%).
Possibility of hazardous reactions: Not established
Conditions to avoid: None known
Incompatible materials: Avoid contact with hot nitric acid, may cause evolution of toxic nitrosyl chloride. Contact with other strong acids may produce irritating hydrogen chloride gas. KCl
may react violently with bromine trifluoride and may explode if mixed with potassium permanganate and sulfuric acid. NaCl can react with most noble metals, such as iron or steel, building materials (such as cement), bromine, or trifluoride. A potentially explosive reaction may occur if NaCl is mixed with dichloromaleic anhydride and urea. Electrolysis of mixtures containing NaCl and nitrogen compounds may form explosive nitrogen trichloride.
Hazardous Decomposition Products: 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: LD_{50} (rat, oral) > 2600 mg/kg LD_{50} (mouse, oral) > 1500 mg/kg
Acute Inhalation Toxicity: No data available
Acute Dermal Toxicity: No data available
Substance: Sodium Chloride
Acute Oral Toxicity: LD_{50} (rat, oral) > 3000 mg/kg LD_{50} (mouse, oral) > 4000 mg/kg
Acute Inhalation Toxicity: LC_{50} (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:

No Information Available.

Section 13: Disposal Considerations:

No Information Available.

Section 14: Transport Information:

No Information Available.

Section 15: Regulatory Information:

No Information Available.

Section 16: Other Information:

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