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Safety Data Sheet
Muriate of Potash

1. Identification

Product identifier	Muriate of Potash
Product code	N.Av.
Other means of identification	This Safety Data Sheet applies to the following products: GRA - Muriate of Potash 0-0-60 Granular. SOG - Muriate of Potash 0-0-62 White Granular, STD - Muriate of Potash 0-0-60 Standard, SUS - Muriate of Potash 0-0-60 Suspension.
Recommended use of the chemical and restrictions on use	Fertilizer. Manufacture of specialty fertilizers.
Distributor	Sylvite 3221 North Service Road, Suite 200 Burlington, Ontario Canada L7N 3G2 Tel. 1-800-229-0602 Fax 905-315-2083 https://www.sylvite.ca/
Emergency phone number	1-800-229-0602

2. Hazard identification

Summary	Avoid contact with eyes. Avoid breathing dust. Use in a manner that avoids generating dust. Do not ingest. If medical advice is needed, have this SDS or label at hand. Wear eye protection, gloves and other protective clothing that are adapted to the task being performed and the risks involved.

WHMIS 2015/GHS/OSHA HCS 2012

Not Regulated under WHMIS 2015/GHS

P101: If medical advice is needed, have product container or label at hand.
P102: Keep out of reach of children.
P103: Read label before use.

3. Composition/information on ingredients

Common name	CAS	Weight % content
Potassium chloride	7447-40-7	95 - 99 %
Sodium chloride	7647-14-5	1 - 4 %

4. First-aid measures

Inhalation	Move person to fresh air. If not breathing, give artificial respiration. If a problem develops or persists, seek medical attention.
Skin contact	Wash skin with warm water and mild soap. Remove contaminated clothing and wash before reuse. If a problem develops or persists, seek medical attention.
Eye contact	Flush with water for at least 15 minutes. Remove contact lenses if easy to do. Hold eyelids apart to rinse properly. If a problem develops or persists, seek medical attention.
Ingestion	DO NOT induce vomiting, unless recommended by medical personnel. If victim is conscious wash out mouth with water and give 1-2 glasses of water to drink. Never give anything by mouth if victim is unconscious or convulsing. If a problem develops or persists, seek medical attention.
Other	No additional information.
Symptoms	Direct contact with eyes may cause temporary irritation. Prolonged and repeated contact may cause skin dryness and irritation.
Notes to the physician	Apply a symptomatic and supportive treatment.

5. Fire-fighting measures

Suitable extinguishing media	Use an extinguishing agent appropriate for the surrounding fire.
Specific hazards arising from the chemical	No hazard listed.
Special protective equipment	Firefighters must wear self contained breathing apparatus with full face mask.
Special protective actions for fire-fighters	No additional information.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Make sure to wear personal protective equipment mentioned in this Safety Data Sheet.
Environmental precautions	Prevent entry into sewers, closed areas and release to the environment.
Methods and materials for containment and cleaning up	Ventilate the area well. Pick up with a shove, a broom, or vacuum. Take care not to scatter dust Finish cleaning by rinsing with water contaminated surface.

7. Handling and storage

Precautions for safe handling	Use in well ventilated area. Avoid breathing dust. Use in a manner that avoids generating dust. Avoid contact with skin, eyes and clothing. Wear eye protection, gloves and other protective clothing that are adapted to the task being performed and the risks involved. Keep containers tightly closed when not in use. Do not eat, do not drink and do not smoke during use. Wash hands, forearms and face thoroughly after handling this compound and before eating, drinking or using toiletries. Remove

	contaminated clothing and wash before reuse.
Conditions for safe storage, including any incompatibilities	Store tightly closed and in properly labelled containers in a cool, dry and well ventilated place. Store away from incompatible materials (see section 10). Keep away from moisture. Product is hygroscopic and tends to cake on storage. Keep away from food and drink.
Storage temperature	

8. Exposure controls/personal protection

Immediately Dangerous to Life or Health	No IDLH value is reported.

Mixture	TWA (8h)	Respirable Dust	3 mg/m^3	AB
		Respirable Dust	5 mg/m^3	OSHA
		Total Dust	10 mg/m^3	AB
		Total Dust	15 mg/m^3	OSHA

Appropriate engineering controls	Provide sufficient mechanical (general and/or local exhaust) to keep the airborn concentrations of dust below their respective occupational exposure limits.
Individual protection measures	
Eye	In the workplace, wear safety glasses with side shields. However, goggles are recommended if the product is used in such a way as to generate high dust levels.
Hands	In case of prolonged contact wear neoprene or nitrile gloves. Disposable nitrile gloves can also be used, but discard after single use. Before using, user should confirm impermeability. Discard gloves with tears, pinholes, or signs of wear. Gloves must only be worn on clean hands. Wash gloves with water before removing them. After using gloves, hands should be washed and dried thoroughly.
Skin	Personal protective equipment for the body should be selected based on the task being performed and the risks involved. Wear normal work clothing covering arms and legs as required by employer code. If necessary, wear an apron or long-sleeve protective coverall suit.
Respiratory	Respiratory protection is not required for normal use. Where the conditions in the workplace require a respirator, it is necessary to follow a respiratory protection program. Moreover, respiratory protection equipment (RPE) must be selected, fitted, maintained and inspected in accordance with regulations and standard 29 CFR 1910.134 (OSHA), ANSI Z88.2 or CSA Z 94.11 (Canada) and approved by NIOSH/MSHA. For dust nuisance exposures use type N95 particle respirator.
Feet	Not required in normal use.

Safety glasses

9. Physical and chemical properties

Physical state	Crystalline solid	**Flammability**	Non-flammable
Colour	Off-white or Pink or red	**Flammability limits**	N/Ap.
Odour	Odourless	**Flash point**	N/Ap.
Odour threshold	N/Av.	**Auto-ignition temperature**	N/Ap.
pH	7 to 9 @ 10%	**Sensibility to electrostatic charges**	No

Melting point	770°C (1418°F)	**Sensibility to sparks and/or friction**	No
Freezing point	770°C (1418°F)	**Vapour density**	N/Av. (Air = 1)
Boiling point	1420°C (2588°F)	**Relative density**	0.99 to 1.20 kg/L (Water = 1)
Solubility	Soluble in water.	**Partition coefficient n-octanol/water**	<0
Evaporation rate	N/Ap.	**Decomposition temperature**	N/Av.
Vapour pressure	N/Av.	**Viscosity**	N/Ap.
Percent Volatile	N/Av.	**Molecular mass**	N/Ap.
N/Av.: Not Available N/Ap.: Not Applicable Und.: Undetermined N/E: Not Established			

10. Stability and reactivity

Reactivity	May be corrosive to metals. Solutions of potash are corrosive to 304 or 316 stainless steels, and may cause chloride induced stress cracking in these materials. Corrosive properties are highly dependent on operating parameters such as temperature and the strength of any solution.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions (including polymerizations)	A dangerous reaction will not occur.
Conditions to avoid	Absorbs moisture on long-term storage under high humidity conditions.
Incompatible materials	Metal salts, metals, Consult a metallurgical specialist regarding compatibility of materials of construction in handling systems.
Hazardous decomposition products	No decomposition product.

11. Toxicological information

Numerical measures of toxicity	Potassium chloride	Ingestion	2600 mg/kg	Rat	LD50
			1500 mg/kg	Mouse	LD50
		Skin	>2000 mg/kg	Rabbit	LD50
	Sodium chloride	Ingestion	3000 mg/kg	Rat	LD50
		Inhalation	>10.5 mg/l/4h	Rat	LC50
		Skin	>10000 mg/kg	Rabbit	LD50

Likely routes of exposure	Skin, eyes, inhalation.	
Delayed, immediate and chronic effects	**Eye contact**	Direct contact with eyes may cause temporary irritation. Eye Irritation/Corrosion, Rabbit (OECD TG 405): tests performed with each ingredient of this mixture gave not irritating results.
	Skin contact	Prolonged and repeated contact may cause skin dryness and irritation. Not irritating (OECD TG 404).
	Inhalation	Powder may irritate throat and respiratory system and cause coughing.
	Ingestion	No negative effects expected in small quantities. Potassium chloride is used as a salt substitute in human sodium reduced diets and as an animal nutrition supplement. The normal daily dietary intake of potassium and of chloride in humans is 2-4g and 3.5-9 g.

	Respiratory or skin sensitization	Ingredients present at levels greater than or equal to 0.1% of this product are not skin or respiratory sensitizers.
	IARC/NTP Classification	No ingredients listed.
	Carcinogenicity	Ingredients present at levels greater than or equal to 0.1% of this product are not listed as a carcinogen by IARC, ACGIH, NIOSH, NTP or OSHA.
	Mutagenicity	Ingredients in this product present at levels greater than or equal to 0.1% are not known to cause mutagenic effects.
	Reproductive toxicity	Ingredients in this product present at levels greater than or equal to 0.1% are not known to cause reproduction effects.
	Specific target organ toxicity - single exposure	No target organ is listed.
	Specific target organ toxicity - repeated exposure	No target organ is listed.
Interactive effects	No information available.	
Other information	No additional information.	

12. Ecological information

Ecological toxicity	Fish - Pimephales promelas (fathead minnow)	LC50	880 mg/L; 96h (CAS no 7447-40-7) OECD 203
	Aquatic Invertebrate - Daphnia magna (Water flea)	EC50	>440 mg/L; 48h (CAS no 7447-40-7) OECD 202
	Algea - Desmodesmus subspicatus	EC50	9.24 mg/L; 72h (CAS no 7447-40-7)
	Fish - Morone saxatilis - Larvae, fresh water	LC50	100 mg/L; 96h (CAS no 7647-14-5)
	Aquatic Invertebrate - Daphnia Magna (fresh water)	EC50	1661 mg/L; 48h (CAS no 7647-14-5)
	Aquatic plant - Pseudokirchneriella subcapitata - Fresh water	EC50	28.85 mg/L; 72h (CAS no 7647-14-5)
Persistence	Inorganic compounds persist in the environment indefinitely or incorporate into biological systems.		
Degradability	The term biodegradability, as such, is not applicable to inorganic compounds.		
Bioaccumulative potential	Potassium and chloride ions are incorporated into the food chain. log Kow of -0.42		
Mobility in soil	Based on the high solubility in water, a high mobility in soil is to be expected.		
Other adverse effects	This chemical does not deplete the ozone layer.		

13. Disposal considerations

Container 	Important! Prevent waste generation. Use in full. DO NOT dispose residue in sewers, streams or drinking water supply. Dispose via a licensed waste disposal contractor. Empty containers can be treated (recycled) where there is a recovery program. Observe all federal, state/provincial and municipal regulations. If necessary consult the Department of Environment or the relevant authorities.

14. Transport information

UN Number	UN
UN Proper Shipping Name	Not regulated by TDG (Canada) and 49 CFR DOT (USA).
Environmental hazards	This material does not contain marine pollutant.
Special precautions for user	No information available.
TDG - Transportation of Dangerous Goods (Canada & US DOT)	
Transport hazard class(es)	Not regulated
Packing group	Not regulated
Emergency response guidebook 2016	
IMO/IMDG - International Maritime Transport	
Classification	Not regulated
IATA - International Air Transport Association	
Classification	Not regulated

These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. In addition, if a domestic exemption exists, it is the responsibility of the shipper to define the application of it.

15. Regulatory information

CANADA

Common name	CAS	CEPA	DSL	NDSL	NPRI
Potassium chloride	7447-40-7		X		
Sodium chloride	7647-14-5		X		

- CEPA: List of Toxic Substances Managed Under Canadian Environmental Protection Act
- DSL: Domestic Substances List Inventory
- NDSL: Non-Domestic Substances List Inventory
- NPRI: National Pollutant Release Inventory Substances

UNITED STATE OF AMERICA

Common name	CAS	TSCA	CER CLA	EPCRA 313	EPCRA 302/304	CAA 112(b) HON	CAA 112(b) HAP	CAA 112(r)	CWA 311	CWA Prio.
Potassium chloride	7447-40-7	X								
Sodium chloride	7647-14-5	X								

- TSCA: Toxic Substance Control Act
- CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act list of hazardous substances
- EPCRA 313: Emergency Planning and Community Right-to-Know Act, Section 313 Toxic Chemicals
- EPCRA 302/304: Emergency Planning and Community Right-to-Know Act, Section 302/304 Extremely Hazardous Substances
- CAA 112(b) HON: Clean Air Act - Hazardous Organic National Emission Standard for Hazardous Air Pollutant
- CAA 112(b) HAP: Clean Air Act - Hazardous Air Pollutants lists pollutants
- CAA 112(r): Clean Air Act - Regulated Chemicals for Accidental Release Prevention
- CWA 311: Clean Water Act - List of Hazardous Substances
- CWA Priority: Clean Water Act - Priority Pollutant list

California Proposition 65

No ingredients listed.

Other regulations	
	HMIS 1 Heath 0 Flamability 0 Reactivity A Protective Equipment **NFPA** 

16. Other information

Date (YYYY-MM-DD)	Sylvite 2020-05-06
Version	03
Other information	REFERENCES: - Potassium chloride, The Registry of Toxic Effects of Chemical Substances, RTECS #: TS8050000. - Service du répertoire toxicologique de la Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST), http://www.reptox.csst.qc.ca - Haz-Map, Information on Hazardous Chemicals and Occupational Diseases, https://haz-map.com/ DATE OF FIRST VERSION OF SDS: 2013-05-27 DATE OF SECOND VERSION OF SDS: 2016-02-18. ACGIH: American Conference of Governmental Industrial Hygienists AIHA: American Industrial Hygiene Association HMIS: Hazardous Materials Identification System NFPA: National Fire Protection Association OSHA: Occupational Safety and Health Administration (USA) NIOSH: National Institute for Occupational Safety and Health NTP: National Toxicology Program RSST: Règlement sur la santé et la sécurité du travail (Québec) GHS: Globally Harmonized System IARC: International Agency for Research on Cancer IDLH: Immediately Dangerous to Life or Health STEL: Short Term Exposure Limit (15 min) TWA: Time Weighted Averages WHMIS: Workplace Hazardous Materials Information System To the best of our knowledge, the information contained herein is accurate. However, neither Prï¿½ventis System nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.