



Potash, Muriate of Potash, Sylvite

Safety Data Sheet

NON-HAZARDOUS CHEMICAL.

SAFETY DATA SHEET IS NOT REQUIRED BY THE FOLLOWING INTERNATIONAL REGULATIONS:

Regulation (EC) No. 453/2010; US 29CFR1910.1200; Canadian Controlled Products Regulation; Japanese Industrial Standard JIS Z 7253:2012; Korean Ministry of Employment and Labor Public Notice No.2012-14; China GBT17519-2013.

Date of issue: 27/03/2018

Version: 1.1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Substance
Trade name : Potash, Muriate of Potash, Sylvite
CAS No : 7447-40-7

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Use of the substance/mixture : Fertilizer. Industrial processings & uses.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Canpotex, Limited
#400, 111 - 2nd Avenue South
Saskatoon, Saskatchewan
Canada S7K 3R7
T - +1 (306) 931-2200 08:30 - 16:30 CST

1.4. Emergency telephone number

Emergency number : Non-hazardous material. Regulations that pertain to country specific emergency response numbers do not apply.
Use Canpotex company phone number for additional information.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to GHS

Not classified

Adverse physicochemical, human health and environmental effects

No adverse health or environmental effects are expected to occur as a result of normal conditions of use.

2.2. Label elements

Labelling according to GHS

No labeling applicable

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH, annex XIII.

This substance/mixture does not meet the vPvB criteria of REACH, annex XIII.

Other hazards not contributing to the classification : None under normal conditions.

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type : Mono-constituent
Name : Potassium chloride

Name	Product identifier	%	Classification according to GHS
Potassium chloride	(CAS No) 7447-40-7 (EC no) 231-211-8 (KE no) KE-29086 Japan CSCL #1-228	95 - 99.9	Not classified
Sodium chloride	(CAS No) 7647-14-5 (EC no) 231-598-3 (KE no) KE-31387 Japan CSCL #1-236	0.1 - 5	Not classified

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3.2. Mixture

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation	: If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
First-aid measures after skin contact	: Not expected to present a significant skin hazard under anticipated conditions of normal use. Brush off loose particles from skin. Gently wash with plenty of soap and water.
First-aid measures after eye contact	: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
First-aid measures after ingestion	: Not expected to present a significant ingestion hazard under anticipated conditions of normal use.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation	: Inhalation may cause: irritation, coughing, shortness of breath.
Symptoms/injuries after skin contact	: No significant signs or symptoms indicative of any health hazard are expected to occur as a result of skin contact.
Symptoms/injuries after eye contact	: No significant signs or symptoms indicative of any adverse health hazard are expected to occur as a result of eye exposure.
Symptoms/injuries after ingestion	: Like any product not designed to be ingested, this product may cause stomach distress if ingested in large quantities.

4.3. Indication of any immediate medical attention and special treatment needed

All treatments should be based on observed signs and symptoms of distress in the patient.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media	: None known.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: No particular fire or explosion hazard.
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5.3. Advice for firefighters

Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection. Wear a self-contained breathing apparatus. Wear fire/flame resistant/retardant clothing. EN469.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

Protective equipment	: Avoid all eyes and skin contact and do not breathe vapour and mist.
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6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: Stay upwind. Collect spillage. Large spills: scoop solid spill into closing containers. Minimize generation of dust.
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6.4. Reference to other sections

Reference to other sections (8, 13).

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Hygiene measures	: Always wash your hands immediately after handling this product, and once again before leaving the workplace.
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7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Store in a cool and well-ventilated place. Store in a closed container. Store in a dry place.
Packaging materials	: Do not store in corrodable metal: aluminum, carbon steel.

7.3. Specific end use(s)

Fertilizer. Industrial processings & uses.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Potash, Muriate of Potash, Sylvite (7447-40-7) as Total inert dust/particulate not otherwise regulated		
China GBZ 2.1-2007	容许浓度时间加权平均 Permissible Concentration (PC)	8 mg/m ³ TWA
FR - Ministère du Travail	Valeur limite de Moyenne d'Exposition (Workplace Exposure Limit Values)	5 mg/m ³ TWA
IT - Associazione Italiana Degli Igienisti Industriali	Valori limite (sulla base di ACGIH TLVs) (Threshold Limit Values (based on ACGIH TLVs))	3 mg/m ³ TWA
Netherlands - Ministerie van Sociale Zaken en Werkgelegenheid	Maximaal Aanvarde Concentratie (MAC) (Maximum Allowable Concentration (MAC))	5 mg/m ³ TWA
Saskatchewan	CAD SK OEL (Occupational Exposure Limit in Saskatchewan, Canada.)	10 mg/m ³ TWA inhalable 3 mg/m ³ TWA respirable fraction
UK - Health & Safety Executive	Workplace Exposure Limits (WEL)	4 mg/m ³ TWA
US - OSHA	Permissible Exposure Limits (PEL)	15 mg/m ³ TWA inhalable 5 mg/m ³ TWA respirable fraction

Potassium chloride (7447-40-7)	
DNEL/DMEL (Workers)	
Acute - systemic effects, dermal	910 mg/kg bodyweight/day
Acute - systemic effects, inhalation	5320 mg/m ³
Long-term - systemic effects, dermal	303 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	1064 mg/m ³
DNEL/DMEL (General population)	
Acute - systemic effects, dermal	910 mg/kg bodyweight
Acute - systemic effects, inhalation	1365 mg/m ³
Acute - systemic effects, oral	455 mg/kg bodyweight
Long-term - systemic effects, oral	91 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	273 mg/m ³
Long-term - systemic effects, dermal	182 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0.1 mg/l
PNEC aqua (marine water)	0.1 mg/l
PNEC aqua (intermittent, freshwater)	1 mg/l
PNEC (STP)	
PNEC sewage treatment plant	10 mg/l

Sodium chloride (7647-14-5)	
DNEL/DMEL (Workers)	
Acute - systemic effects, dermal	296 mg/kg bodyweight/day
Acute - systemic effects, inhalation	2069 mg/m ³
Long-term - systemic effects, dermal	296 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	2069 mg/m ³
DNEL/DMEL (General population)	
Acute - systemic effects, dermal	127 mg/kg bodyweight
Acute - systemic effects, inhalation	443 mg/m ³
Acute - systemic effects, oral	127 mg/kg bodyweight
Long-term - systemic effects, oral	127 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	443 mg/m ³
Long-term - systemic effects, dermal	127 mg/kg bodyweight/day

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8.2. Exposure controls

Appropriate engineering controls	: Avoid dispersal of dust in the air (ie, clearing dust surfaces with compressed air). Provide local exhaust or general room ventilation to minimize exposure to dust.
Hand protection	: Leather gloves. EN374
Eye protection	: Safety glasses. In case of dust production: protective goggles. EN166
Skin and body protection	: Impervious clothing
Respiratory protection	: Use air-purifying respirator equipped with particulate filtering cartridges. Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. EN 136/140

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Dry flowable granules
Molecular mass	: 74.6 g/mol
Colour	: White to red/brown
Odour	: Odourless to slight
Odour threshold	: No data available
pH	: No data available
pH solution	: 5% (5.4 - 10)
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 771 - 776 °C
Freezing point	: 771 - 776 °C
Boiling point	: No data available
Flash point	: Not applicable
Self ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non-flammable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 1.984 - 2 water = 1
Density	: 770 - 1330 kg/m ³ (Bulk density)
Solubility	: Soluble in water Water: 99.5 - 99.99 %
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: Dust explosion characteristics: <63µm; explosibility: St 1; minimum ignition energy (mJ): N/A
Oxidizing properties	: No data available
Explosive limits	: No data available

9.2. Other information

Sublimation point	: 1410 - 1500 °C
VOC content	: < 0.5 %
Additional information	: Similar to salt, may be corrosive to some metals in the presence of moisture.

SECTION 10: Stability and reactivity

10.1. Reactivity

Strong acids.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Incompatible materials.

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10.5. Incompatible materials

Strong acids, boron trichloride, boron trifluoride, potassium dichromate, potassium permanganate, sulfuric acid.

10.6. Hazardous decomposition products

No dangerous decomposition products known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Potassium chloride (7447-40-7)	
LD50 oral rat	3020 mg/kg
Sodium chloride (7647-14-5)	
LD50 oral rat	3550 mg/kg
LD50 dermal rat	> 10000 mg/kg
LC50 inhalation rat (mg/l)	> 42 mg/l/1 hour
LC50 inhalation rat (Dust/Mist - mg/l/4h)	10.5 mg/l/4h

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

Symptoms/injuries after inhalation : Inhalation may cause: irritation, cough, shortness of breath.

Symptoms/injuries after skin contact : No significant signs or symptoms indicative of any health hazard are expected to occur as a result of skin contact.

Symptoms/injuries after eye contact : No significant signs or symptoms indicative of any adverse health hazard are expected to occur as a result of eye exposure.

Symptoms/injuries after ingestion : Like any product not designed to be ingested, this product may cause stomach distress if ingested in large quantities.

Likely routes of exposure: : Dermal, inhalation

SECTION 12: Ecological information

12.1. Toxicity

Potassium chloride (7447-40-7)	
LC50 fishes 1	880 mg/l <i>Pimephales promelas</i> 96 hr
EC50 <i>Daphnia</i> 1	440 - 880 48 hr
ErC50 (algae)	> 100 mg/l
NOEC (chronic)	500 mg/l 7 day

Sodium chloride (7647-14-5)	
LC50 fishes 1	5840 mg/l 96 hour; <i>Lepomis macrochirus</i>
EC50 <i>Daphnia</i> 1	4136 mg/l 48 hr
NOEC (acute)	1500 mg/l <i>Daphnia</i> ; 7 day
NOEC chronic fish	252 mg/l 33 day

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

Potash, Muriate of Potash, Sylvite (7447-40-7)	
Ecology - soil	Mixture components are completely soluble in water. Partitions to soil.

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12.5. Results of PBT and vPvB assessment

Potash, Muriate of Potash, Sylvite (7447-40-7)

This substance/mixture does not meet the PBT criteria of REACH, annex XIII.

This substance/mixture does not meet the vPvB criteria of REACH, annex XIII.

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods	: Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems.
Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
EURLW code	: For disposal within the EC, the appropriate code according to the European Waste Catalogue (EWC) should be used.

SECTION 14: Transport information

In accordance with ADR / RID / ADN / IMDG / IATA

14.1. UN number

Not considered a dangerous good for transport regulations

14.2. UN proper shipping name

Proper Shipping Name (ADR)	: Not applicable
Proper Shipping Name (IMDG)	: Not applicable
Proper Shipping Name (IATA)	: Not applicable
Proper Shipping Name (ADN)	: Not applicable
Proper Shipping Name (RID)	: Not applicable

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : Not applicable

IMDG

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : Not applicable

ADN

Transport hazard class(es) (ADN) : Not applicable

RID

Transport hazard class(es) (RID) : Not applicable

14.4. Packing group

Packing group (ADR)	: Not applicable
Packing group (IMDG)	: Not applicable
Packing group (IATA)	: Not applicable
Packing group (ADN)	: Not applicable
Packing group (RID)	: Not applicable

14.5. Environmental hazards

Dangerous for the environment	: No
Marine pollutant	: No
Other information	: No supplementary information available

14.6. Special precautions for user

Not applicable

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

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SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Potash, Muriate of Potash, Sylvite is not on the REACH Candidate List

Potash, Muriate of Potash, Sylvite is not on the REACH Annex XIV List

VOC content : < 0.5 %

Germany

Water hazard class (WGK) : 1 - slightly hazardous to water

15.1.2. International regulations

All components are listed on the European Inventory of Existing Commercial Chemical Substances (EINECS).

All ingredients are listed in the Canadian Domestic Substances List (DSL). Uncontrolled product according to WHMIS classification criteria. This document has been prepared in accordance with the SDS requirements of the WHMIS Controlled Products Regulation (CPR).

All ingredients are listed in the US Toxic Substances Control Act (TSCA).

All ingredients are listed on the Chinese Inventory of Existing Chemical Substances (IECSC).

All ingredients are listed on KECI (Chemical Inventory of Korea).

All ingredients are listed on the Japanese ENCS (Existing & New Chemicals Substances) inventory.

15.1.3. United States regulations

This product has been reviewed according to the Environmental Protection Agency ("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:

Fire: No; Pressure Generating: No; Reactivity: No; Acute: No; Chronic: No

40 CFR Part 355 – Extreme Hazardous Substances: None

40 CFR Part 370 – Hazardous Chemical Report: None

CERCA/ RCRA 261.33: Not listed

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Indication of changes: Revision date: 27/03/2018

Original document date of issue: 06/04/2015

Abbreviations and acronyms:

ACGIH	ACGIH (American Conference of Governmental Industrial Hygienists)
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ATE	Acute Toxicity Estimate
CAS	(Chemical Abstracts Service) number
CERCA	Comprehensive Environmental Response, Compensation & Liability Act
CFR	(United States) Code of Federal Regulations
CLP	Classification and Labeling of Chemicals
CSDL	Japanese Chemical Substances Control Law
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC	European Communities
EC50	Median effective concentration
EURLW	European List of Waste (LoW) code
GBT	Chinese national standard
GHS	Globally Harmonized System (of Classification and Labeling of Chemicals).
IATA	International Air Transport Association
IBC	Intermediate Bulk Container
IMDG	International Maritime Dangerous Goods
KECI	Korean Existing Chemical Inventory
LD50	Lethal Dose for 50% of the test population
MARPOL	International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978

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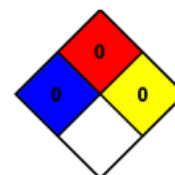
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NOEC	No Observable Effect Concentration
OSHA	Occupational Safety & Health Administration
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No Effect Level
RCRA	Resource Conservation and Recovery Act
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
TSCA	Toxic Substances Control Act
TWA	Time Weighted Average
vPvB	Very Persistent and Very Bioaccumulative
VOC	Volatile Organic Compound

Data sources : ACGIH (American Conference of Governmental Industrial Hygienists).
Canadian Centre for Occupational Health and Safety. Accessed at:
http://www.ccohs.ca/oshanswers/legisl/whmis_classifi.html.
China GBZ 2.1-2007 Occupational exposure limits for hazardous agents in the workplace:
Chemical hazardous agents.
European Chemicals Agency (ECHA) Registered Substances list.
National Fire Protection Association. Fire Protection Guide to Hazardous Materials; 10th edition.
The Organisation for Economic Co-operation and Development (OECD; eChemPortal chemical searches. Accessed at
<http://www.echemportal.org/echemportal/substancesearch/substancesearchlink.action>.
<http://www.eurosil.eu/sites/eurosil.eu/files/files/OEL-FULL-TABLE-Oct07-Europe.pdf>

Other information : Method of classification used: component data.

NFPA health hazard : 0 - Exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials.
NFPA fire hazard : 0 - Materials that will not burn.
NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.