

## SECTION 1) CHEMICAL PRODUCT AND SUPPLIER'S IDENTIFICATION

**CAS Number:** 7447-40-7  
**Product Name:** Potassium Chloride  
**Revision Date:** Jul 13, 2021 **Date Printed:** Oct 12, 2021  
**Version:** 1.0 **Supersedes Date:** N.A.  
**Manufacturer's Name:** Thames River Chemical Corp.  
**Address:** 5230 Harvester Road Burlington, ON, CA, L7L 4X4  
**Emergency Phone:** CHEMTREC (800) 424-9300  
**Information Phone Number:** 905-681-5353  
**Fax:** 905-681-5377  
**Product/Recommended Uses:** For laboratory or industrial use only.

## SECTION 2) HAZARDS IDENTIFICATION

### Classification

Not classified

### Pictograms

None

### Signal Word

No signal word available.

### Hazard Statements - Health

Excessive exposure may result in eye, skin, or respiratory irritation.

### Hazard Statements - Physical

Material can accumulate static charges which may cause an ignition.

### Precautionary Statements - General

No precautionary statement available.

### Precautionary Statements - Prevention

No precautionary statement available.

### Precautionary Statements - Response

No precautionary statement available.

### Precautionary Statements - Storage

No precautionary statement available.

### Precautionary Statements - Disposal

No precautionary statement available.

### Physical Hazards Not Otherwise Classified

No data available.

### Health Hazards Not Otherwise Classified

Excessive exposure may result in eye, skin, or respiratory irritation.

**SECTION 3) COMPOSITION/INFORMATION ON INGREDIENTS**

CAS	Chemical Name	% By Weight
0007447-40-7	POTASSIUM CHLORIDE	98% - 98%
0007647-14-5	SODIUM CHLORIDE	2% - 2%

Specific chemical identity and/or exact percentage (concentration) of the composition has been withheld to protect confidentiality or to reflect batch to batch variation.

**SECTION 4) FIRST-AID MEASURES****Inhalation**

Move person to fresh air and keep comfortable for breathing; consult a physician.

**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.

**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.

**Ingestion**

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

**SECTION 5) FIRE-FIGHTING MEASURES****5.2 Specific Hazards in Case of Fire**

Potassium Chloride is non-combustible, however, when this material is subjected to temperatures of 1,500 C (2,732 F) or greater, it may release small amounts of chlorine gas.

**5.1 Extinguishing media**

Use extinguishing agent suitable for type of surrounding fire.

**5.3 Advice for firefighters**

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)

**SECTION 6) ACCIDENTAL RELEASE MEASURES****6.1 Personal precautions, protective equipment and emergency procedures**

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.

**SECTION 7) HANDLING AND STORAGE****7.1 Precautions for safe 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.

## 7.2 Conditions for safe storage, including any incompatibilities

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

## SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

### Eye protection

Approved eye protection to safeguard against potential eye contact, irritation, or injury is recommended.

### Skin Protection

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

### Respiratory Protection

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.

### Appropriate 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.

### 8.2 Exposure Controls

OSHA Permissible Exposure Limits(PEL): Particulate Not Otherwise Regulated: 5 mg/m3 TWA (respirable);15 mg/m3 TWA (total).  
 ACGIH Threshold Limit Value(TLV): Particulate Not Otherwise Specified: 3 mg/m3 TWA(respirable); 10mg/m3 TWA(inhalable).

None of the chemicals in Section 3 are regulated under "ACGIH\_carcinogen", "ACGIH\_Notations", "ACGIH\_TLV\_Basis", "ACGIHsmg", "ACGIHsppm", "ACGIHtmg", "ACGIHtppm", "CAN\_AL\_Carcinogen", "CAN\_AL\_Notation", "CAN\_ALsmg", "CAN\_ALsppm", "CAN\_ALtmg", "CAN\_ALtppm", "CAN\_ONsmg", "CAN\_ONsppm", "CAN\_ONtmg", "CAN\_ONtppm", "CAN\_QCVECDmg - CANADA\_QUEBEC VALEUR D'EXPOSITION DE COURTE DURÉE\_mg", "CAN\_QCVECDppm - CANADA\_QUEBEC VALEUR D'EXPOSITION DE COURTE DURÉE\_ppm", "CAN\_QCVEMPmg - CANADA\_QUEBEC VALEUR D'EXPOSITION MOYENNE PONDÉRÉE\_mg", "CAN\_QCVEMPppm - CANADA\_QUEBEC VALEUR D'EXPOSITION MOYENNE PONDÉRÉE\_ppm", "CANsmg", "CANSppm", "CANtmg", "CANtppm", "OSHA\_SkinDesignation", "OSHA\_Tables\_Z1\_Z2\_Z3", "OSHA\_Carcinogen - OSHA Carcinogen", "OSHAsmg", "OSHASppm", "OSHAtmg", "OSHAtppm"

## SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

### Physical and Chemical Properties

Density	1025-1200 kg/l
Specific Gravity	1.986-1.990
Appearance	White to reddish brown, crystalline or granular
Odor Description	none/ strong saline
Odor Threshold	No data available
pH	5.4-10.0 in a 5% solution
Melting/Freezing Point	772 to 776 °C
Low Boiling Point	sublimes at 1500 °C
High Boiling Point	N/A
Flash Point	N/A
Vapor Pressure	N/A
Vapor Density	N/A

Evaporation Rate	No data available
Upper Explosion Level	N/A
Lower Explosion Level	N/A
Water Solubility	34.2g/100mL at 20°C
Coefficient Water/Oil	N/A
Viscosity	N/A

**SECTION 10) STABILITY AND REACTIVITY****Conditions to Avoid**

No data available

**10.2 Chemical Stability**

Material is hygroscopic (may absorb moisture from air when relative humidity > 72%) Stable under normal storage and handling conditions.

**Hazardous Reactions/Polymerization**

Hazardous polymerization will not occur.

**Incompatible Materials**

Oxidizing agents. Strong acids.

**Hazardous Decomposition Products**

No data available.

**SECTION 11) TOXICOLOGICAL INFORMATION****Acute Toxicity**

Substance: Potassium Chloride  
Oral Toxicity: LD50 (rat, oral) > 2600 mg/kg LD50 (mouse, oral) > 1500 mg/kg.  
Inhalation toxicity: No data available.  
Dermal toxicity: No data available.

Substance: Sodium Chloride  
Oral Toxicity: LD50 (rat, oral) > 3000 mg/kg LD50 mouse, oral > 4000 mg/kg.  
Inhalation Toxicity: LC50 (rat) > 42 g/m<sup>3</sup>/1 hour.  
Dermal Toxicity: No data available.

The Acute Toxicity Estimate (ATE) for an oral exposure to this mixture is >5000 mg/kg body weight

The Acute Toxicity Estimate (ATE) for a dermal exposure to this mixture is >5000 mg/kg body weight

The Acute Toxicity Estimate (ATE) for an inhalation (vapour) exposure to this mixture is >20 mg/l

**Carcinogenicity**

No data available.

**Germ Cell Mutagenicity**

No data available.

**SECTION 12) ECOLOGICAL INFORMATION****Toxicity**

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 heterostropha* 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

### 13.1 Waste Treatment Methods

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) TRANSPORT INFORMATION

### Transport Canada Information

UN number: Not Regulated  
 Hazard class: N/A  
 Proper shipping name: N/A  
 Packaging group: N/A

### U.S. DOT Information

UN number: Not Regulated  
 Hazard class: N/A  
 Packaging group: N/A  
 Proper shipping name: N/A

## SECTION 15) REGULATORY INFORMATION

### Safety, health and environmental regulations

TSCA: This substance is listed on the TSCA inventory

CAS	Chemical Name	% By Weight	Regulation List
0007447-40-7	POTASSIUM CHLORIDE	98% - 98%	DSL,TSCA,EU_EC_Inventory - European_EC_Inventory
0007647-14-5	SODIUM CHLORIDE	2% - 2%	DSL,TSCA,EU_EC_Inventory - European_EC_Inventory

## SECTION 16) OTHER INFORMATION

### Glossary

ACGIH- American Conference of Governmental Industrial Hygienists; ANSI- American National Standards Institute; Canadian TDG- Canadian Transportation of Dangerous Goods; CANsmg or CANspmm - Canadian Short Term Exposure Level in mg/L or in ppm; CANtmg or CANTppm - Canadian Time Weighted Average in mg/L or in ppm; CAS- Chemical Abstract Service; Chemtrec- Chemical Transportation Emergency Center(US); CHIP- Chemical Hazard Information and Packaging; DSL- Domestic Substances List; EC- Equivalent Concentration; EH40 (UK)- HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA- Emergency Planning and Community Right-To-Know Act; ESL Effects screening levels; HMIS- Hazardous Material Information Service; LC- Lethal Concentration; LD- Lethal Dose; NFPA- National Fire Protection Association; OEL- Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL- Permissible Exposure Limit; SARA (Title III)- Superfund Amendments and Reauthorization Act; SARA 313- Superfund Amendments and Reauthorization Act, Section 313; SCBA- Self Contained Breathing Apparatus; STEL-Short Term Exposure Limit; TCEQ Texas Commission on Environmental Quality; TLV- Threshold Limit Value; TSCA- Toxic Substances Control



# SAFETY DATA SHEET

CAS Number: 7447-40-7  
Product Description: Potassium  
Chloride

Act Public Law 94-469; TWA Time Weighted Value; US DOT- US Department of Transportation; WHMIS- Workplace Hazardous Materials Information System.

## Version 1.0:

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