



# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

<b>Product Name</b>	<b>Sulfate of Potash</b>
<b>CAS #</b>	7778-80-5
<b>Product use</b>	Specialty crop nutrient, turf grass fertilizer, general fertilizer uses, and specialty industrial uses.
<b>Manufacturer</b>	Great Salt Lake Minerals Corporation A Compass Minerals Company 9900 West 109th Street, Suite 100 Overland Park, KS 66210 US Phone: 913-344-9200
<b>CHEMTREC</b>	1-800-424-9300
<b>CANUTEC</b>	1-613-996-6666

## 2. Hazards Identification

<b>Emergency overview</b>	Contact may cause eye and skin irritation.
<b>Potential short term health effects</b>	
<b>Routes of exposure</b>	Eye, Skin contact, Inhalation, Ingestion.
<b>Eyes</b>	May cause irritation.
<b>Skin</b>	May cause irritation.
<b>Inhalation</b>	Dusts of this product may cause irritation of the nose, throat, and respiratory tract.
<b>Ingestion</b>	May cause stomach distress, nausea or vomiting.
<b>Target organs</b>	Eyes. Skin. Respiratory system.
<b>Chronic effects</b>	Prolonged or repeated exposure can cause drying, defatting and dermatitis.
<b>Signs and symptoms</b>	Symptoms may include redness, edema, drying, defatting and cracking of the skin. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.
<b>OSHA Regulatory Status</b>	This product is NOT known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
<b>Potential environmental effects</b>	See section 12.

## 3. Composition / Information on Ingredients

<b>Ingredient(s)</b>	<b>CAS #</b>	<b>Percent</b>
Potassium sulfate	7778-80-5	99 - 100

## 4. First Aid Measures

<b>First aid procedures</b>	
<b>Eye contact</b>	Flush with cool water. Remove contact lenses, if applicable, and continue flushing. Obtain medical attention if irritation persists.
<b>Skin contact</b>	Brush away excess of dry material. Flush with cool water. Wash with soap and water. Obtain medical attention if irritation persists.
<b>Inhalation</b>	If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.
<b>Ingestion</b>	Do not induce vomiting. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.
<b>Notes to physician</b>	Symptoms may be delayed.
<b>General advice</b>	If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.

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## 5. Fire Fighting Measures

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<b>Flammable properties</b>	Not flammable by WHMIS/OSHA criteria.
<b>Extinguishing media</b>	
<b>Suitable extinguishing media</b>	Treat for surrounding material.
<b>Unsuitable extinguishing media</b>	Not available
<b>Protection of firefighters</b>	
<b>Specific hazards arising from the chemical</b>	Not available
<b>Protective equipment for firefighters</b>	Firefighters should wear full protective clothing including self contained breathing apparatus.
<b>Hazardous combustion products</b>	May include and are not limited to: Oxides of sulphur.
<b>Explosion data</b>	
<b>Sensitivity to mechanical impact</b>	Not available
<b>Sensitivity to static discharge</b>	Not available

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## 6. Accidental Release Measures

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<b>Personal precautions</b>	Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.
<b>Environmental precautions</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for containment</b>	Prevent entry into waterways, sewers, basements or confined areas.
<b>Methods for cleaning up</b>	Before attempting clean up, refer to hazard data given above. Use broom or dry vacuum to collect material for proper disposal without raising dust. Rinse area with water. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice.

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## 7. Handling and Storage

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<b>Handling</b>	Use good industrial hygiene practices in handling this material. Avoid breathing dust. Wash thoroughly after handling.
<b>Storage</b>	Keep out of reach of children. Store in a closed container away from incompatible materials.

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## 8. Exposure Controls / Personal Protection

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<b>Exposure limits</b>	
<b>Ingredient(s)</b>	<b>Exposure Limits</b>
Potassium sulfate	<b>ACGIH-TLV</b> Not established <b>OSHA-PEL</b> Not established
<b>Engineering controls</b>	<p>TWA PEL: No specific limits have been established for potassium sulfate (a soluble substance). As a guideline, OSHA (United States) has established the following limits which are generally recognized for inert or nuisance dust. Particulates Not Otherwise Regulated (PNOR): 5mg/cu.m. Respirable Dust 8-Hour TWA PEL, 15mg/cu.m. Total Dust 8-Hour TWA PEL.</p> <p>TWA TLV: No specific limits have been established for potassium sulfate (a soluble substance). As a guideline, ACGIH (United States) has established the following limits which are generally recognized for inert or nuisance dust. Particulates (insolubles) Not Otherwise Classified (PNOC): 10mg/cu.m. Inhalable Particulate 8-Hours TWA TLV, 3mg/cu.m. Respirable Particulate TWA TLV.</p> <p>Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.</p>

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## Personal protective equipment

<b>Eye / face protection</b>	Wear safety glasses with side shields.
<b>Hand protection</b>	Rubber gloves. Confirm with a reputable supplier first.
<b>Skin and body protection</b>	As required by employer code.
<b>Respiratory protection</b>	Where exposure guideline levels may be exceeded, use an approved NIOSH respirator or NIOSH-approved filtering facepiece.
<b>General hygiene considerations</b>	Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

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## 9. Physical and Chemical Properties

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<b>Appearance</b>	Solid.
<b>Color</b>	white to brown
<b>Form</b>	Crystals or Granular.
<b>Odor</b>	Odorless
<b>Odor threshold</b>	Not available
<b>Physical state</b>	Solid
<b>pH</b>	7 (10% solution)
<b>Melting point</b>	1956.20 °F (1069 °C)
<b>Freezing point</b>	1952.60 °F (1067 °C)
<b>Boiling point</b>	3072.20 °F (1689 °C)
<b>Pour point</b>	Not available
<b>Evaporation rate</b>	Not available
<b>Flash point</b>	None
<b>Auto-ignition temperature</b>	Not available
<b>Flammability limits in air, lower, % by volume</b>	Not applicable
<b>Flammability limits in air, upper, % by volume</b>	Not applicable
<b>Vapor pressure</b>	Not available
<b>Vapor density</b>	Not available
<b>Specific gravity</b>	2.66 @21°C (H <sub>2</sub> O = 1)
<b>Relative density</b>	2.662 g/cm <sup>3</sup>
<b>Octanol/water coefficient</b>	Not available
<b>Solubility (H<sub>2</sub>O)</b>	Appreciable
<b>Percent volatile</b>	Not available
<b>Molecular weight</b>	174.2700
<b>Molecular formula</b>	K <sub>2</sub> SO <sub>4</sub>

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## 10. Stability and Reactivity

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<b>Reactivity</b>	None known.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Conditions to avoid</b>	Do not mix with other chemicals.
<b>Incompatible materials</b>	Magnesium. Aluminum.
<b>Hazardous decomposition products</b>	May include and are not limited to: Oxides of sulphur.

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## 11. Toxicological Information

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### Component analysis - LC50

<b>Ingredient(s)</b>	<b>LC50</b>
Potassium sulfate	Not available

**Component analysis - Oral LD50**

Ingredient(s)	LD50
Potassium sulfate	6600 mg/kg rat
<b>Effects of acute exposure</b>	
<b>Eye</b>	May cause irritation.
<b>Skin</b>	May cause irritation.
<b>Inhalation</b>	Dusts of this product may cause irritation of the nose, throat, and respiratory tract.
<b>Ingestion</b>	May cause stomach distress, nausea or vomiting.
<b>Sensitization</b>	Non-hazardous by WHMIS/OSHA criteria.
<b>Chronic effects</b>	Non-hazardous by WHMIS/OSHA criteria.
<b>Carcinogenicity</b>	Not classified or listed by IARC, NTP, OSHA and ACGIH.
<b>Mutagenicity</b>	Non-hazardous by WHMIS/OSHA criteria.
<b>Reproductive effects</b>	Non-hazardous by WHMIS/OSHA criteria.
<b>Teratogenicity</b>	Non-hazardous by WHMIS/OSHA criteria.
<b>Name of Toxicologically Synergistic Products</b>	Not available

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## 12. Ecological Information

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<b>Ecotoxicity</b>	See below
<b>Ecotoxicity - Freshwater Algae - Acute Toxicity Data</b>	
Potassium sulfate	7778-80-5      72 Hr EC50 Desmodesmus subspicatus: 2900 mg/L
<b>Ecotoxicity - Freshwater Fish - Acute Toxicity Data</b>	
Potassium sulfate	7778-80-5      96 Hr LC50 Lepomis macrochirus: 653 mg/L; 96 Hr LC50 Lepomis macrochirus: 3550 mg/L [static]; 96 Hr LC50 Pimephales promelas: 510-880 mg/L [static]
<b>Ecotoxicity - Water Flea - Acute Toxicity Data</b>	
Potassium sulfate	7778-80-5      48 Hr EC50 Daphnia magna: 890 mg/L
<b>Persistence / degradability</b>	Not available
<b>Bioaccumulation / accumulation</b>	Not available
<b>Mobility in environmental media</b>	Not available
<b>Environmental effects</b>	Not available
<b>Aquatic toxicity</b>	Not available
<b>Partition coefficient</b>	Not available
<b>Chemical fate information</b>	Not available
<b>Other adverse effects</b>	Not available

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## 13. Disposal Considerations

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<b>Disposal instructions</b>	Waste must be disposed of in accordance with federal, state/provincial and local environmental control regulations.
<b>Waste from residues / unused products</b>	Not available
<b>Contaminated packaging</b>	Not available

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## 14. Transport Information

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<b>U.S. Department of Transportation (DOT)</b>	Not regulated as dangerous goods.
<b>Transportation of Dangerous Goods (TDG - Canada)</b>	Not regulated as dangerous goods.

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## 15. Regulatory Information

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<b>Canadian federal regulations</b>	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.
<b>WHMIS status</b>	Not Controlled

**Occupational Safety and Health Administration (OSHA)**

29 CFR 1910.1200 hazardous chemical No

**US Federal regulations** This product is NOT known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.**CERCLA (Superfund) reportable quantity**

None

**Superfund Amendments and Reauthorization Act of 1986 (SARA)****Hazard categories** Immediate Hazard - No  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No**Section 302 extremely hazardous substance** No**Section 311 hazardous chemical** No**Clean Air Act (CAA)** Not available**Clean Water Act (CWA)** Not available**State regulations** WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.**Inventory name**

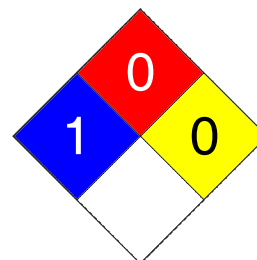
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

**16. Other Information**

LEGEND HMIS/NFPA	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

Health	/ 1
Flammability	0
Physical Hazard	0
Personal Protection	B

**Disclaimer**

Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

**Issue date** 21-Feb-2012**Effective date** 01-Mar-2012**Expiry date** 01-Mar-2015**Prepared by** Dell Tech Laboratories Ltd. (519) 858-5021**Other information** This MSDS conforms to the ANSI Z400.1/Z129.1-2010 Standard.