



SAFETY DATA SHEET

1. Product and Company Identification

Product identifier	Sulfate of Potash
Other means of identification	Turf Granular SOP, Ag Granular SOP, Soluble Fines SOP, Standard SOP, Mid Granular SOP, Mini Granular SOP, Choice Granular SOP, Organic K+@Ag Granular SOP, Organic K+@Soluble Fines SOP, Organic K+@Standard SOP, Organic K+@Mid Granular SOP, Organic K+@Mini Granular SOP, Organic K+@Choice Granular SOP, Protassium+™ Organic Standard, Protassium+™ Organic Mid Granular, Protassium+™ Organic Soluble Fines, Protassium+™ Organic Ag Granular, Protassium+™ Organic Standard Fines, Protassium+™ Organic Mini Granular, Protassium+™ Turf Granular, Protassium+™ Choice Granular, Protassium+™ Standard Fines, Protassium+™ Soluble Fines, Protassium+™ Mini Granular, Protassium+™ Greens Grade, Protassium+™ Ag Granular, Protassium+™ Mid Granular, Protassium+™ 220 GL, Protassium+™ 145 GL, Protassium+™ 17 IX, Protassium+™ 3 IX, Protassium+™ 90 IX, Protassium+™ 40 IX, Protassium+™ 17 GL, Protassium+™ 145 IX, Protassium+™ 40 GL, Protassium+™ 30 GL, SOP-220, SOP-145, SOP-17IX, SOP-25IX, SOP-40IX, SOP-90IX, SOP-145IX, SOP-235IX, SOP-17, SOP-30, SOP-30P, Protassium+™ 25 IX, Protassium+™ 30 IX, Protassium+™ 235 IX, SOP-3, SOP-30IX, SOP-40.
Recommended use	Specialty crop nutrient, turf grass fertilizer, general fertilizer uses, and specialty industrial uses.
Recommended restrictions	None known.
Manufacturer	Compass Minerals International 9900 West 109th Street, Suite 100 Overland Park, KS 66210 US Phone 913-344-9200
CHEMTREC	1-800-424-9300
CANUTEC	1-613-996-6666

2. Hazards Identification

Physical hazards	Not classified.
Health hazards	Not classified.
Environmental hazards	Not classified.
OSHA defined hazards	Not classified.
Label elements	
Hazard symbol	None.
Signal word	Not available.
Hazard statement	Not available.
Precautionary statement	
Prevention	Not available.
Response	Not available.
Storage	Not available.
Disposal	Not available.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/Information on Ingredients

Substance			
Chemical name	Common name and synonyms	CAS number	%
Potassium sulfate	SOP, Sulfate of Potash	7778-80-5	92 - 100

4. First Aid Measures

Inhalation	If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention. Call a physician if symptoms develop or persist.
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Skin contact	Brush away excess of dry material. Flush with cool water. Wash with soap and water. Obtain medical attention if irritation persists.
Eye contact	Flush with cool water. Remove contact lenses, if applicable, and continue flushing. Obtain medical attention if irritation persists.
Ingestion	Do not induce vomiting. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation. Exposed individuals may experience eye tearing, redness, and discomfort.
Indication of immediate medical attention and special treatment needed	Symptoms may be delayed.
General information	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.

5. Fire Fighting Measures

Suitable extinguishing media	Treat for surrounding material.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	Firefighters should wear a self-contained breathing apparatus.
Special protective equipment and precautions for firefighters	Firefighters should wear full protective clothing including self contained breathing apparatus.
Fire-fighting equipment/instructions	In the event of fire, cool tanks with water spray.
Specific methods	Cool containers exposed to flames with water until well after the fire is out.
Hazardous combustion products	May include and are not limited to: Oxides of sulfur.
Explosion data	
Sensitivity to mechanical impact	Not available.
Sensitivity to static discharge	Not available.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear a dust mask if dust is generated above exposure limits. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid inhalation of dust from the spilled material. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	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. For waste disposal, see section 13 of the SDS.
Environmental precautions	Do not discharge into lakes, streams, ponds or public waters.

7. Handling and Storage

Precautions for safe handling	Avoid breathing dust. Minimize dust generation and accumulation. Provide appropriate exhaust ventilation at places where dust is formed. In case of insufficient ventilation, wear suitable respiratory equipment. Use good industrial hygiene practices in handling this material. Wash thoroughly after handling.
Conditions for safe storage, including any incompatibilities	Guard against dust accumulation of this material. Store in a well-ventilated place. Store in a closed container. Keep out of reach of children.

8. Exposure Controls/Personal Protection

Occupational exposure limits	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).
Exposure guidelines	This material does not have established exposure limits.

Appropriate engineering controls

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.

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.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Wear safety glasses with side shields.

Skin protection**Hand protection**

Use protective gloves. Confirm with a reputable supplier first.

Other

As required by employer code.

Respiratory protection

Where exposure guideline levels may be exceeded, use an approved NIOSH respirator or NIOSH-approved filtering facepiece.

Thermal hazards

Not available.

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and immediately after handling the product. When using do not eat or drink.

9. Physical and Chemical Properties

Appearance

Solid.

Physical state

Solid.

Form

Powder, Crystals or Granular.

Color

white to brown

Odor

Odorless

Odor threshold

Not available.

pH

7 (10% solution)

7 Aqueous solution is neutral

Melting point/freezing point

1952.6 °F (1067 °C)

Initial boiling point and boiling range

3072.2 °F (1689 °C)

3072.2 °F (1689 °C)

Pour point

Not available.

Specific gravity

2.66 @21°C (H₂O = 1)

2.66

Partition coefficient (n-octanol/water)

Not available.

Flash point

None

Evaporation rate

Not available.

Flammability (solid, gas)

Not applicable.

Upper/lower flammability or explosive limits**Flammability limit - lower (%)**

Not applicable

Flammability limit - upper (%)

Not applicable

Explosive limit - lower (%)

Not available.

Explosive limit - upper (%)

Not available.

Vapor pressure

< 0 kPa at 25 °C

Vapor density

Not available.

Relative density

Not available.

Solubility(ies)

Appreciable

Auto-ignition temperature

Not available.

Decomposition temperature

Not available.

Viscosity

Not available.

Other information**Density**

2.66 g/cm³ estimated

Flash point class

Flammable IB

Molecular formula	K2SO4
Molecular weight	174.27

10. Stability and Reactivity

Reactivity	May react with the following components: Aluminum. Magnesium.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Contact with incompatible materials. Do not mix with other chemicals.
Incompatible materials	None when used and stored according to label directions.
Hazardous decomposition products	May include and are not limited to: Oxides of sulfur.

11. Toxicological Information

Routes of exposure	Eye, Skin contact, Inhalation, Ingestion.	
Information on likely routes of exposure		
Ingestion	May cause stomach distress, nausea or vomiting.	
Inhalation	Inhalation of dusts may cause respiratory irritation.	
Skin contact	May be irritating to the skin.	
Eye contact	May be irritating to eyes. Dust in the eyes will cause irritation.	
Symptoms related to the physical, chemical and toxicological characteristics	Direct contact with eyes may cause temporary irritation. Exposed individuals may experience eye tearing, redness, and discomfort.	
Information on toxicological effects		
Acute toxicity		
Components	Species	Test Results
Potassium sulfate (CAS 7778-80-5)		
Acute		
<i>Dermal</i>		
LD50	Not available	
<i>Inhalation</i>		
LC50	Not available	
<i>Oral</i>		
LD50	Rat	6600 mg/kg
Skin corrosion/irritation	May cause irritation.	
Exposure minutes	Not available.	
Erythema value	Not available.	
Oedema value	Not available.	
Serious eye damage/eye irritation	Dust in the eyes will cause irritation.	
Corneal opacity value	Not available.	
Iris lesion value	Not available.	
Conjunctival reddening value	Not available.	
Conjunctival oedema value	Not available.	
Recover days	Not available.	
Respiratory or skin sensitization		
Respiratory sensitization	Not available.	
Skin sensitization	Not available.	
Germ cell mutagenicity	Non-hazardous by WHMIS/OSHA criteria.	
Mutagenicity	Non-hazardous by WHMIS/OSHA criteria.	
Carcinogenicity	Not classified or listed by IARC, NTP, OSHA and ACGIH.	
Reproductive toxicity	Non-hazardous by WHMIS/OSHA criteria.	
Teratogenicity	Non-hazardous by WHMIS/OSHA criteria.	

Specific target organ toxicity - single exposure	Not available.
Specific target organ toxicity - repeated exposure	Not available.
Aspiration hazard	Not available.
Chronic effects	Non-hazardous by WHMIS/OSHA criteria.
Further information	Not available.
Name of Toxicologically Synergistic Products	Not available.

12. Ecological Information

Ecotoxicity	See below		
Product		Species	Test Results
Sulfate of Potash			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	510 - 880 mg/l, 96 hours
Components		Species	Test Results
Potassium sulfate (CAS 7778-80-5)			
Algae	IC50	Algae	2900 mg/L, 72 Hours
Crustacea	EC50	Daphnia	890 mg/L, 48 Hours
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	510 - 880 mg/l, 96 hours
Persistence and degradability	Not available.		
Bioaccumulative potential	Not available.		
Mobility in soil	Not available.		
Mobility in general	Not available.		
Other adverse effects	Not available.		

13. Disposal Considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Waste must be disposed of in accordance with federal, state/provincial and local environmental control regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport Information

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

15. Regulatory Information

Canadian federal regulations	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.
WHMIS status	Not Controlled
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.
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)	
Not regulated.	

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

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

SARA 302 Extremely hazardous substance
No

SARA 311/312 Hazardous chemical
No

SARA 313 (TRI reporting)
Not regulated.

Other federal regulations

Safe Drinking Water Act (SDWA)
Not regulated.

Food and Drug Administration (FDA)
Direct food additive

US state regulations
This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Not listed.

US. Massachusetts RTK - Substance List

Not regulated.

US. Pennsylvania RTK - Hazardous Substances

Not regulated.

US. Rhode Island RTK

Not regulated.

Inventory status

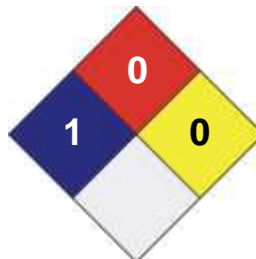
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

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

16. Other Information

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

HEALTH	/ 1
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	X

**Disclaimer**

For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document.

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. The above SDS reflects the latest information on file with respect to hazards, properties and handling of this product. No warranty however, expressed or implied, is made with regard to the use of this information. The information in the sheet was written based on the best knowledge and experience currently available.

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Further information	Not available.
Prepared by	Dell Tech Laboratories, Ltd. Phone: (519) 858-5021
Other information	This SDS conforms to the ANSI Z400.1/Z129.1-2010 Standard.