



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	Common name and synonyms	CAS number	%
Chemical name	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.
-------------------	---

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

Use protective gloves. Confirm with a reputable supplier first.

Hand protection

As required by employer code.

Other

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

Potassium sulfate (CAS 7778-80-5)

Acute

Dermal

LD50 Not available

Inhalation

LC50 Not available

Oral

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.

Test Results

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	Fathead minnow (Pimephales promelas)	510 - 880 mg/l, 96 hours
Components	Species	Test Results
Potassium sulfate (CAS 7778-80-5)		
Algae	Algae	2900 mg/L, 72 Hours
Crustacea	Daphnia	890 mg/L, 48 Hours
Aquatic		
Fish	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.
 Not Controlled

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
 - 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

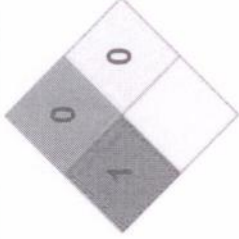
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*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.

Issue date

13-April-2015

Effective date

01-April-2015

Expiry date

01-April-2018

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.