Sulfate of Potash

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015) & OSHA Hazard Communication Standard 29 CFR 1910.1200 (HazCom 2012)
Issue date: 3/24/2006 Revision date: 8/12/2024 Supersedes: 2/3/2021 Version: 3.0

SECTION 1: Identification

1.1. Product identifier

Product form	:	Substance
Substance name	:	Sulfate of Potash
CAS-No.	:	7778-80-5
Synonyms	:	Potassium Sulfate
Other means of identification	:	Protassium+® Ag Granular/ Mid Granular/ Standard Fines for Organic Production Sulfate of Potash 0-0-50 Plus 17% Sulfur; Protassium+® Ag Granular/ Mid Granular/ Mini Granular/ Standard Fines/ Greens Grade/ 220 GR ECO/ 145 GR ECO/ 220 GR Sulfate of Potash 0-0-50 Plus 17% Sulfur; Protassium+® 17 GL/ 30 GL/ 40 GL Sulfate of Potash 0-0-52 Plus 18% Sulfur; Protassium+® 3 IX/ 17 IX/ 40 IX/ 90 IX/ 145 IX/ Sulfate of Potash 0-0-53 Plus 18% Sulfur; Potassium Sulfate 3 IX/ 17 IX/ 40 IX; Potassium Sulfate 3 IX MC/ 17 GL/ 40 GL; Potassium Sulfate SOP-3 MC; K2SO4-KCl Ultra Superfine Blend

1.2. Recommended use and restrictions on use

Recommended use	:	Specialty crop nutrient, turf grass fertilizer, general fertilizer uses and specialty industrial uses.

1.3. Supplier

Manufacturer
Compass Minerals Ogden Inc.
765 N 10500 W
Ogden, UT, 84404
USA
T 1-800-551-8216

Supplier
Compass Minerals Wynyard Inc.
#2 Big Quill Road
P.O. Box S0A 4T0
Wynyard, SK
Canada
T 1-800-551-8216

1.4. Emergency telephone number

Emergency number	:	1-800-424-9300 (CHEMTREC); 1-613-996-6666 (CANUTEC)

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification (GHS CA/US)

Not classified

2.2. GHS Label elements, including precautionary statements

GHS CA/US labeling

No labeling applicable

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS CA/US)

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Name	:	Sulfate of Potash

CAS-No. : 7778-80-5

Name	Product identifier	%
Sulfuric acid, dipotassium salt	CAS-No.: 7778-80-5	80 - 100

3.2. Mixtures

Not applicable

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If you feel unwell, seek medical advice.

First-aid measures after skin contact : Wash skin with plenty of water. Obtain medical attention if irritation persists.

First-aid measures after eye contact : Rinse eyes with water as a precaution. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation persists.

First-aid measures after ingestion : Do not induce vomiting. If vomiting occurs have person lean forward. Never give anything by mouth to an unconscious person. Call a poison center or a doctor if you feel unwell.

First-aid measures general : If you feel unwell, seek medical advice (show the label where possible). Medical personnel should be made aware of substance(s) involved and take measures for self protection. Show this safety data sheet to the doctor in attendance. Avoid contact with skin and eyes. Keep out of the reach of children.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : Prolonged inhalation may be harmful.

Symptoms/effects after skin contact : Prolonged or repeated contact may dry skin and cause irritation.

Symptoms/effects after eye contact : Direct contact with eyes may cause temporary irritation.

Symptoms/effects after ingestion : May cause stomach distress, nausea or vomiting.

4.3. Immediate medical attention and special treatment, if necessary

Other medical advice or treatment : Symptoms may be delayed. Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media : Treat for surrounding material.

5.2. Unsuitable extinguishing media

Unsuitable extinguishing media : Do not use a water jet since it may cause the fire to spread.

5.3. Specific hazards arising from the hazardous product

Fire hazard : During fire, gases hazardous to health may be formed. In case of fire or explosion do not breathe fumes.

Explosion hazard : No direct explosion hazard.

Hazardous decomposition products in case of fire : May include and are not limited to: Sulfur oxides (SOx). Potassium oxides.

5.4. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Move containers from fire area if it can be done without personal risk.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Keep unnecessary personnel away. For personal protection, see section 8 of the SDS. In the event of a significant spillage : Notify authorities if product enters sewers or public waters.

6.2. Methods and materials for containment and cleaning up

For containment : Stop leaks if it can be done without personal risk. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for cleaning up : Take up mechanically (sweeping, shoveling) and collect in suitable container for disposal. Clean contaminated surfaces with an excess of water. Minimize generation of dust.

Other information : This material and its container must be disposed of in a safe way, and as per local legislation.

6.3. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection"

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes. Avoid breathing dust. Do not taste or swallow. Ensure good ventilation of the work station. Wear personal protective equipment. Handle and open container with care.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep out of reach of children. Store tightly closed in a dry, cool and well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls : Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:
Wear protective gloves. Confirm with a reputable supplier first.

Eye protection:
Wear eye protection

Skin and body protection:
Wear suitable protective clothing. As required by employer code.

Respiratory protection:
Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. Respirator should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134), CAN/CSA-Z94.4 and ANSI's standard for respiratory protection (Z88.2).

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Solid
Appearance	:	Powder. Crystals. Granular.
Color	:	Off-white Beige brown Gray pink pale orange
Odor	:	Odourless
Odor threshold	:	No data available
pH	:	6 – 10
pH solution concentration	:	5 %
Relative evaporation rate (butyl acetate=1)	:	No data available
Relative evaporation rate (ether=1)	:	No data available
Molecular mass	:	174.27 g/mol
Melting point	:	1067 °C / 1952.6 °F
Freezing point	:	Not applicable
Boiling point	:	1689 °C / 3072.2 °F
Flash point	:	Not applicable
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	No data available
Vapor pressure	:	No data available
Relative vapor density at 20°C	:	No data available
Relative density	:	2.66 (21 °C)
Density	:	2.66 g/cm³ estimated
Solubility	:	No data available
Partition coefficient n-octanol/water (Log Pow)	:	No data available
Viscosity, kinematic	:	Not applicable
Explosive properties	:	Not explosive.
Oxidizing properties	:	Not oxidising.
Explosion limits	:	Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

Reactivity	:	May react with: Aluminium. Magnesium.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	No dangerous reactions known under normal conditions of use.
Conditions to avoid	:	Keep away from heat and direct sunlight. Do not mix with other chemicals. Avoid dust formation.
Incompatible materials	:	None when used and stored according to label directions.
Hazardous decomposition products	:	May include and are not limited to: Sulfur oxide. Potassium oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Sulfuric acid, dipotassium salt (7778-80-5)	
LD50 oral rat	6600 mg/kg (Source: NLM_CIP)
LD50 dermal rat	> 2000 mg/kg (Source: ECHA_API)
ATE CA (oral)	6600 mg/kg body weight

Skin corrosion/irritation : Not classified.
Serious eye damage/irritation : Not classified

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Sulfuric acid, dipotassium salt (7778-80-5)	
NOAEL (chronic,oral,animal/male,2 years)	256 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
NOAEL (chronic,oral,animal/female,2 years)	284 mg/kg body weight Animal: rat, Animal sex: female, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)

Reproductive toxicity : Not classified
STOT-single exposure : Not classified

STOT-repeated exposure : Not classified
Aspiration hazard : Not classified
Likely routes of exposure : Skin and eye contact. Ingestion. Inhalation.
Symptoms/effects after inhalation : Prolonged inhalation may be harmful.
Symptoms/effects after skin contact : Prolonged or repeated contact may dry skin and cause irritation.
Symptoms/effects after eye contact : Direct contact with eyes may cause temporary irritation.
Symptoms/effects after ingestion : May cause stomach distress, nausea or vomiting.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : See below for route-specific details.
Hazardous to the aquatic environment, short–term (acute) : Not classified
Hazardous to the aquatic environment, long–term (chronic) : Not classified

Sulfuric acid, dipotassium salt (7778-80-5)	
LC50 - Fish [1]	653 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus Source: IUCLID)
LC50 - Fish [2]	3550 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static] Source: EPA)
EC50 - Crustacea [1]	890 mg/l (Exposure time: 48 h - Species: Daphnia magna)

Sulfuric acid, dipotassium salt (7778-80-5)	
EC50 72h - Algae [1]	2900 mg/l (Species: Desmodesmus subspicatus)

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Ozone : Not classified

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of the material collected according to regulations.

Sewage disposal recommendations : Disposal must be done according to official regulations.

Product/Packaging disposal recommendations : Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling, disposal or collection.

SECTION 14: Transport information

TDG	DOT
14.1. UN number	
Not regulated	Not regulated
14.2. Proper Shipping Name	
Not regulated	Not regulated
14.3. Transport hazard class(es)	
Not regulated	Not regulated
14.4. Packing group	
Not regulated	Not regulated
14.5. Environmental hazards	
Not regulated	Not regulated
No supplementary information available	

14.6. Special precautions for user

TDG
Not regulated

DOT
Not regulated

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

Not applicable

SECTION 15: Regulatory information

15.1. National regulations

All components of this product are present on DSL

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

Issue date	:	03/24/2006
Revision date	:	08/12/2024
Supersedes	:	02/03/2021
Other information	:	For an updated SDS, please contact the supplier or manufacturer listed on the first page of the document.

The information in the safety data sheet was written by Dell Tech Laboratories Ltd. (www.delltech.com) based on the best knowledge and experience currently available. 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.