

SAFETY DATA SHEET

Creation Date 27-Oct-2009 Revision Date 18-Jan-2018 Revision Number 4

1. Identification

Product Name Potassium sulfate

Cat No.: P304-3; P304-3LC; P304-10; P304-500; P305-500; P306-300LB

CAS-No 7778-80-5

Synonyms Dipotassium sulfate; Potassium sulfate (2:1); Sulfuric acid, dipotassium salt

(Crystalline/Powder/Certified ACS)

Recommended Use Laboratory chemicals.

Uses advised against Not for food, drug, pesticide or biocidal product use

Details of the supplier of the safety data sheet

Company

Fisher Scientific One Reagent Lane Fair Lawn, NJ 07410 Tel: (201) 796-7100

Emergency Telephone Number

CHEMTREC®, Inside the USA: 800-424-9300 CHEMTREC®, Outside the USA: 001-703-527-3887

2. Hazard(s) identification

Classification

Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Based on available data, the classification criteria are not met

Label Elements

None required

Hazards not otherwise classified (HNOC)

None identified

3. Composition/Information on Ingredients

Component	CAS-No	Weight %
Sulfuric acid dipotassium salt	7778-80-5	>95

4. First-aid measures

Revision Date 18-Jan-2018 Potassium sulfate

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention if symptoms occur.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if

symptoms occur.

Inhalation Move to fresh air. Get medical attention if symptoms occur. If not breathing, give artificial

respiration.

Ingestion Do not induce vomiting. Obtain medical attention.

Most important symptoms and

effects

Notes to Physician

No information available.

Treat symptomatically

5. Fire-fighting measures

Substance is nonflammable; use agent most appropriate to extinguish surrounding fire. **Suitable Extinguishing Media**

Unsuitable Extinguishing Media No information available

Flash Point No information available No information available Method -

Autoignition Temperature

Explosion Limits

No data available Upper Lower No data available Sensitivity to Mechanical Impact No information available Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.

Hazardous Combustion Products

Sulfur oxides

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA_

Health	Flammability	Instability	Physical hazards
1	0	0	N/A

6. Accidental release measures

Personal Precautions Environmental Precautions Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation. Should not be released into the environment. See Section 12 for additional ecological

information.

Up

Methods for Containment and Clean Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation.

	7. Handling and storage
Handling	Wear personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation. Avoid dust formation.
Storage	Keep containers tightly closed in a dry, cool and well-ventilated place.

Revision Date 18-Jan-2018 Potassium sulfate

8. Exposure controls / personal protection

This product does not contain any hazardous materials with occupational exposure **Exposure Guidelines**

limitsestablished by the region specific regulatory bodies.

Engineering Measures None under normal use conditions.

Personal Protective Equipment

Wear appropriate protective eyeglasses or chemical safety goggles as described by **Eye/face Protection**

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

FN166.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

No protective equipment is needed under normal use conditions. **Respiratory Protection**

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical State Solid White **Appearance** Odor Odorless

Odor Threshold No information available Ha

~ 6-8 5% ag.sol.(20 C) **Melting Point/Range** 1067 °C / 1952.6 °F

1689 °C / 3072.2 °F @ 760 mmHg **Boiling Point/Range**

Flash Point No information available **Evaporation Rate** Not applicable

Flammability (solid,gas) No information available

Flammability or explosive limits

Upper No data available Lower No data available **Vapor Pressure** No information available

Vapor Density Not applicable

Specific Gravity No information available Solubility Partly soluble in water Partition coefficient; n-octanol/water No data available

Autoignition Temperature Decomposition Temperature

No information available

Viscosity Not applicable K2 O4 S Molecular Formula **Molecular Weight** 174.25

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Stable under normal conditions.

Incompatible products. Excess heat. Avoid dust formation. **Conditions to Avoid**

Strong oxidizing agents **Incompatible Materials**

Hazardous Decomposition Products Sulfur oxides

Hazardous Polymerization No information available.

Potassium sulfate Revision Date 18-Jan-2018

Hazardous Reactions

None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sulfuric acid dipotassium salt	LD50 = 6600 mg/kg (Rat)	Not listed	Not listed

Toxicologically Synergistic

Products

No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation No information available

No information available Sensitization

The table below indicates whether each agency has listed any ingredient as a carcinogen. Carcinogenicity

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Sulfuric acid	7778-80-5	Not listed				
dipotassium salt						

No information available **Mutagenic Effects**

Reproductive Effects No information available.

Developmental Effects No information available.

Teratogenicity No information available.

STOT - single exposure None known STOT - repeated exposure None known

No information available **Aspiration hazard**

Symptoms / effects, both acute and No information available

delayed

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity

Do not empty into drains. .

Sulfuric acid dipotassium FC50: 2900 mg/l 72h LC50: 510 - 880 mg/l .96h Not listed FC50: 890 mg/l 48h	Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
salt static (Pimephales promelas) LC50: = 653 mg/L, 96h (Lepomis macrochirus) LC50: = 3550 mg/L, 96h static (Lepomis macrochirus)	Sulfuric acid dipotassium salt	EC50: 2900 mg/L 72h	promelas) LC50: = 653 mg/L, 96h (Lepomis macrochirus) LC50: = 3550 mg/L, 96h		EC50: 890 mg/L 48h

Persistence and Degradability Soluble in water Persistence is unlikely based on information available.

Bioaccumulation/ Accumulation No information available.

Potassium sulfate Revision Date 18-Jan-2018

Mobility

Will likely be mobile in the environment due to its water solubility.

13. Disposal considerations

Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

DOT Not regulated
TDG Not regulated
IATA Not regulated
IMDG/IMO Not regulated

15. Regulatory information

International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
Sulfuric acid dipotassium salt	Χ	Χ	-	231-915-5	-		Χ	Χ	Χ	Χ	Χ

Legend:

- X Listed
- E Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.
- F Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
- N Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
- P Indicates a commenced PMN substance
- R Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
- S Indicates a substance that is identified in a proposed or final Significant New Use Rule
- T Indicates a substance that is the subject of a Section 4 test rule under TSCA.
- XU Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).
- Y1 Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.
- Y2 Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b) Not applicable

SARA 313 Not applicable

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

OSHA Occupational Safety and Health Administration

Not applicable

CERCLA Not applicable

California Proposition 65 This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know

Regulations

Not applicable

U.S. Department of Transportation

Reportable Quantity (RQ): N
DOT Marine Pollutant N

Potassium sulfate Revision Date 18-Jan-2018

DOT Severe Marine Pollutant N

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

16. Other information

Prepared By Regulatory Affairs

Thermo Fisher Scientific

Email: EMSDS.RA@thermofisher.com

 Creation Date
 27-Oct-2009

 Revision Date
 18-Jan-2018

 Print Date
 18-Jan-2018

Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard

replacing the current legislation under 29 CFR 1910.1200 to align with the Globally

Harmonized System of Classification and Labeling of Chemicals (GHS).

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS