

Revision Date: 16.05.2018

SAFETY DATA SHEET

1. Identification

Product identifier: POTASSIUM HYDROGEN SULFATE

Other means of identification

Product No.: 7112, 2960

Recommended use and restriction on use

Recommended use: Not determined. Restrictions on use: Not determined.

Details of the supplier of the safety data sheet

Avantor Performance Materials, LLC.

3477 Corporate Parkway Center Valley, PA 18034

Telephone:

Customer Service: 855-282-6867

Fax: 610-573-2610

Contact Person: Environmental Health & Safety E-mail: info@avantormaterials.com

Emergency telephone number:

CHEMTREC: 1-800-424-9300 within US and Canada

2. Hazard(s) identification

Hazard Classification

Health Hazards

Skin Corrosion/Irritation Category 1B
Serious Eye Damage/Eye Irritation Category 1
Specific Target Organ Toxicity - Category 3^{1.}

Single Exposure

Target Organs

1. Respiratory tract irritation.

Unknown toxicity - Health

Acute toxicity, oral 100 %
Acute toxicity, dermal 100 %
Acute toxicity, inhalation, vapor 100 %
Acute toxicity, inhalation, dust 100 %

or mist

Unknown toxicity - Environment

Acute hazards to the aquatic 100 % environment



Revision Date: 16.05.2018

Chronic hazards to the aquatic 100 % environment

Label Elements

Hazard Symbol:



Signal Word: Danger

Hazard Statement: Causes severe skin burns and eye damage.

May cause respiratory irritation.

Precautionary Statements

Prevention: Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after

handling. Wear protective gloves/protective clothing/eye protection/face

protection. Use only outdoors or in a well-ventilated area.

Response: IF INHALED: Remove person to fresh air and keep comfortable for

breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. Wash contaminated clothing before reuse. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a

POISON CENTER/doctor.

Storage: Store locked up. Store in a well-ventilated place. Keep container tightly

closed.

Disposal: Dispose of contents/container to an appropriate treatment and disposal

facility in accordance with applicable laws and regulations, and product

characteristics at time of disposal.

Other hazards which do not result in GHS classification:

None.

3. Composition/information on ingredients

Substances

Chemical name	Common name and synonyms	CAS number	Content in percent (%)*
SULFURIC ACID, MONOPOTASSIUM SALT		7646-93-7	90 - 100%

^{*} All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures



Revision Date: 16.05.2018

General information: Get medical advice/attention if you feel unwell. Show this safety data sheet

to the doctor in attendance.

Ingestion: Call a physician or poison control center immediately. Rinse mouth. Do

NOT induce vomiting. If vomiting occurs, keep head low so that stomach

content doesn't get into the lungs.

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. Apply artificial

respiration if victim is not breathing Call a physician or poison control center

immediately.

Skin Contact: Immediately flush with plenty of water for at least 15 minutes while

removing contaminated clothing and shoes. Call a physician or poison control center immediately. Wash contaminated clothing before reuse.

Destroy or thoroughly clean contaminated shoes.

Eye contact: Immediately flush with plenty of water for at least 15 minutes. If easy to do,

remove contact lenses. Call a physician or poison control center

immediately. In case of irritation from airborne exposure, move to fresh air.

Most important symptoms/effects, acute and delayed

Symptoms: Causes severe skin and eye burns. Causes digestive tract burns. Mist or

vapor extremely irritating to eyes and respiratory tract.

Hazards: None known.

Indication of immediate medical attention and special treatment needed

Treat symptomatically. Symptoms may be delayed.

5. Fire-fighting measures

General Fire Hazards: No unusual fire or explosion hazards noted.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing

media:

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing

media:

None known.

Specific hazards arising from

the chemical:

During fire, gases hazardous to health may be formed. Product is highly caustic. Product is acidic. Wear appropriate protective gear if spilled during

firefighting.

Special protective equipment and precautions for firefighters

Special fire fighting

procedures:

Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool. Cool containers exposed to

flames with water until well after the fire is out.

Special protective equipment

for fire-fighters:

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in

enclosed spaces, SCBA.

6. Accidental release measures



Revision Date: 16.05.2018

Personal precautions, protective equipment and emergency procedures: Keep unauthorized personnel away. Keep upwind. Use personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. See Section 8 of the SDS for Personal Protective

Equipment.

Methods and material for containment and cleaning up:

Neutralize with lime or soda ash. Sweep up and place in a clearly labeled container for chemical waste. Clean surface thoroughly to remove residual contamination.

Notification Procedures:

Prevent entry into waterways, sewer, basements or confined areas. Inform

Environmental Precautions:

Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling: Wear protective gloves/protective clothing/eye protection/face protection.

authorities if large amounts are involved.

Do not get in eyes, on skin, on clothing. Do not taste or swallow. Do not breathe dust/fume/gas/mist/vapors/spray. Wash hands thoroughly after handling. Use caution when adding this material to water. See Section 8 of

the SDS for Personal Protective Equipment.

Conditions for safe storage, including any incompatibilities:

Keep away from food, drink and animal feeding stuffs. Keep container tightly closed. Store in a cool and well-ventilated place. Store in a corrosion-resistant container with a resistant inner liner. Do not store in metal containers.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

None of the components have assigned exposure limits.

Appropriate Engineering

Controls

No data available.

Individual protection measures, such as personal protective equipment

General information: 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. An eye wash and safety shower must be available in the

immediate work area.

Eye/face protection: Wear safety glasses with side shields (or goggles) and a face shield. Wear

a full-face respirator, if needed.

Skin Protection

Hand Protection: Chemical resistant gloves

Other: Wear suitable protective clothing.



Revision Date: 16.05.2018

Respiratory Protection: If engineering controls do not maintain airborne concentrations below

recommended exposure limits (where applicable) or to an acceptable level

(in countries where exposure limits have not been established), an approved respirator must be worn. Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter,

cartridge or canister. Contact health and safety professional or

manufacturer for specific information.

Hygiene measures: Provide eyewash station and safety shower. Always observe good personal

hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Do not get this material in

contact with skin. Do not get in eyes.

9. Physical and chemical properties

Appearance

Physical state: Solid
Form: Powder.
Color: White
Odor: Odorless

Odor threshold: No data available. pH: No data available.

Melting point/freezing point: 197 °C

Initial boiling point and boiling range:No data available.Flash Point:No data available.Evaporation rate:No data available.Flammability (solid, gas):No data available.

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%): No data available. Flammability limit - lower (%): No data available. No data available. **Explosive limit - upper (%):** Explosive limit - lower (%): No data available. Vapor pressure: No data available. Vapor density: No data available. Density: 2,24 g/ml (20 °C) Relative density: 2,24 (20 °C)

Solubility(ies)

Solubility in water: 560 g/l

Solubility (other):

Partition coefficient (n-octanol/water):

Auto-ignition temperature:

Decomposition temperature:

Viscosity:

No data available.

No data available.

No data available.

No data available.

Other information

Molecular weight: 136,17 g/mol (H2O4S)

10. Stability and reactivity

Reactivity: No dangerous reaction known under conditions of normal use.



Revision Date: 16.05.2018

Chemical Stability: Material is stable under normal conditions.

Possibility of hazardous

reactions:

Hazardous polymerization does not occur.

Conditions to avoid: Contact with incompatible materials. Moisture.

Incompatible Materials: Strong bases.

Hazardous Decomposition

Products:

Sulfur dioxide gas may be liberated from the product.

11. Toxicological information

Information on likely routes of exposure

Inhalation: Irritating to respiratory tract.

Skin Contact: Causes severe skin burns.

Eye contact: Causes serious eye damage.

Ingestion: May cause burns of the gastrointestinal tract if swallowed.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: No data available.

Dermal

Product: No data available.

Inhalation

Product: No data available.

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: Causes severe skin burns.

Serious Eye Damage/Eye Irritation

Product: Causes serious eye damage.

Respiratory or Skin Sensitization

Product: Not a skin sensitizer.

Carcinogenicity

Product: This substance has no evidence of carcinogenic properties.



Revision Date: 16.05.2018

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

ACGIH Carcinogen List:

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro

Product: No mutagenic components identified

In vivo

Product: No mutagenic components identified

Reproductive toxicity

Product: No components toxic to reproduction

Specific Target Organ Toxicity - Single Exposure
Product:

No data available.

Specific Target Organ Toxicity - Repeated Exposure
Product:
No data available.

Aspiration Hazard

Product: Not classified

Other effects: None known.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Persistence and Degradability

Biodegradation

Product: There are no data on the degradability of this product.

SDS_CA - SDS000001043



Revision Date: 16.05.2018

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available on bioaccumulation.

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Mobility in soil: No data available.

Other adverse effects: The product components are not classified as environmentally hazardous.

However, this does not exclude the possibility that large or frequent spills

can have a harmful or damaging effect on the environment.

13. Disposal considerations

Disposal instructions: Discharge, treatment, or disposal may be subject to national, state, or local

laws.

Contaminated Packaging: Since emptied containers retain product residue, follow label warnings even

after container is emptied.

14. Transport information

TDG

UN Number: UN 2509

UN Proper Shipping Name: POTASSIUM HYDROGEN SULPHATE

Transport Hazard Class(es)

Class: 8
Label(s): 8
Packing Group: II
Marine Pollutant: No

Special precautions for user: Not determined.

IMDG

UN Number: UN 2509

UN Proper Shipping Name: POTASSIUM HYDROGEN SULPHATE

Transport Hazard Class(es)

 Class:
 8

 Label(s):
 8

 EmS No.:
 F-A, S-B

Packing Group: II
Marine Pollutant: No

Special precautions for user: Not determined.

IATA

UN Number: UN 2509

UN Proper Shipping Name: Potassium hydrogen sulphate

Transport Hazard Class(es):

Class: 8
Label(s): 8
Packing Group: II
Marine Pollutant: No

Special precautions for user: Not determined.

Cargo aircraft only: Allowed.



Revision Date: 16.05.2018

Transport in bulk according to Annex II of MARPOL and the IBC Code: Not applicable

15. Regulatory information

Canada Federal Regulations

List of Toxic Substances (CEPA, Schedule 1)

Not Regulated

Export Control List (CEPA 1999, Schedule 3)

Not Regulated

National Pollutant Release Inventory (NPRI)

Canada. National Pollutant Release Inventory (NPRI) Substances, Part 5, VOCs with Additional Reporting Requirements

NPRI PT5 Not Regulated

Canada. National Pollutant Release Inventory (NPRI) (Schedule 1, Parts 1-4)

NPRI Not Regulated

Greenhouse Gases

Not Regulated

Controlled Drugs and Substances Act

CA CDSI Not Regulated
CA CDSII Not Regulated

CA CDSIII Not Regulated

CA CDSIV Not Regulated

CA CDSV Not Regulated

CA CDSVII Not Regulated

CA CDSVIII Not Regulated

Precursor Control Regulations

Not Regulated

International regulations

Montreal protocol

Not applicable

Stockholm convention

Not applicable

Rotterdam convention

Not applicable

Kyoto protocol

Not applicable



Revision Date: 16.05.2018

Inventory Status:

Australia AICS: Canada DSL Inventory List: EINECS, ELINCS or NLP: Japan (ENCS) List:

China Inv. Existing Chemical Substances: Korea Existing Chemicals Inv. (KECI):

Canada NDSL Inventory: Philippines PICCS: US TSCA Inventory:

New Zealand Inventory of Chemicals:

Japan ISHL Listing:

Japan Pharmacopoeia Listing:

On or in compliance with the inventory Not in compliance with the inventory. On or in compliance with the inventory Not in compliance with the inventory. On or in compliance with the inventory Not in compliance with the inventory.

16.Other information, including date of preparation or last revision

Revision Date: 16.05.2018

Version #: 1.1

Further Information: No data available.

Disclaimer: The information provided in this Safety Data Sheet (SDS) was prepared

based on data believed to be accurate as of the date of this SDS. TO THE GREATEST EXTENT PERMITTED BY LAW, AVANTOR PERFORMANCE

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