# **SAFETY DATA SHEET**

Version 5.1 Revision Date 07/02/2014 Print Date 02/16/2018

## 1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product name : Potassium hydrogensulfate, fused

Product Number : 223697 Brand : Sigma-Aldrich

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich

3050 Spruce Street

SAINT LOUIS MO 63103

USA

Telephone : +1 800-325-5832 Fax : +1 800-325-5052

1.4 Emergency telephone number

Emergency Phone # : +1-703-527-3887 (CHEMTREC)

#### 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

#### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Skin corrosion (Category 1B), H314 Serious eye damage (Category 1), H318

Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

Precautionary statement(s)

P260 Do not breathe dust or mist.

P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/ protective clothing/ eye protection/ face

protection.

P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated

clothing. Rinse skin with water/ shower.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing.

Sigma-Aldrich - 223697 Page 1 of 7

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/ physician.

P321 Specific treatment (see supplemental first aid instructions on this label).

P363 Wash contaminated clothing before reuse.

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P501 Dispose of contents/ container to an approved waste disposal plant.

## 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

## 3.2 Mixtures

Molecular Weight : 136.17 g/mol

## **Hazardous components**

Component		Classification	Concentration
Potassium hydrogensulphate			
CAS-No.	7646-93-7	Skin Corr. 1B; Eye Dam. 1;	-
EC-No.	231-594-1	STOT SE 3; H314, H335	
Index-No.	016-056-00-4		
Dipotassium disulph	nate		
CAS-No.	7790-62-7	Skin Corr. 1B; Eye Dam. 1;	-
EC-No.	232-216-8	H314	

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### 4. FIRST AID MEASURES

#### 4.1 Description of first aid measures

### **General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

## If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

#### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

#### 4.3 Indication of any immediate medical attention and special treatment needed

no data available

#### 5. FIREFIGHTING MEASURES

## 5.1 Extinguishing media

## Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Sigma-Aldrich - 223697 Page 2 of 7

## 5.2 Special hazards arising from the substance or mixture

Sulphur oxides, Potassium oxides

#### 5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

#### 5.4 Further information

no data available

#### 6. ACCIDENTAL RELEASE MEASURES

#### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

## 6.2 Environmental precautions

Do not let product enter drains.

#### 6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

For disposal see section 13.

#### 7. HANDLING AND STORAGE

#### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

## 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

hygroscopic

#### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## 8.1 Control parameters

#### Components with workplace control parameters

Contains no substances with occupational exposure limit values.

#### 8.2 Exposure controls

#### Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### Personal protective equipment

## Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

## Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

## **Body Protection**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Sigma-Aldrich - 223697 Page 3 of 7

## **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Control of environmental exposure

Do not let product enter drains.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

## 9.1 Information on basic physical and chemical properties

a) Appearance Form: solid

b) Odour no data availablec) Odour Threshold no data availabled) pH no data available

e) Melting point/freezing

point

Melting point/range: 214 °C (417 °F)

f) Initial boiling point and

boiling range

no data available

g) Flash point no data available
h) Evapouration rate no data available
i) Flammability (solid, gas) no data available

) Upper/lower flammability or explosive limits

no data available

k) Vapour pressure no data available

I) Vapour density no data availablem) Relative density 2.322 g/cm3

n) Water solubility no data available

 Partition coefficient: noctanol/water no data available

p) Auto-ignition temperature

no data available

q) Decomposition temperature no data available

r) Viscosity no data availables) Explosive properties no data available

Oxidizing properties no data available

## 9.2 Other safety information

no data available

## 10. STABILITY AND REACTIVITY

#### 10.1 Reactivity

no data available

## 10.2 Chemical stability

Stable under recommended storage conditions.

## 10.3 Possibility of hazardous reactions

no data available

Sigma-Aldrich - 223697 Page 4 of 7

#### 10.4 Conditions to avoid

no data available

### 10.5 Incompatible materials

Strong bases, Strong oxidizing agents, Alcohols, Strong reducing agents

## 10.6 Hazardous decomposition products

Other decomposition products - no data available

In the event of fire: see section 5

#### 11. TOXICOLOGICAL INFORMATION

## 11.1 Information on toxicological effects

## **Acute toxicity**

no data available

Inhalation: no data available

Dermal: no data available

no data available

## Skin corrosion/irritation

no data available

## Serious eye damage/eye irritation

no data available

## Respiratory or skin sensitisation

no data available

## Germ cell mutagenicity

no data available

## Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a

carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a

known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a

carcinogen or potential carcinogen by OSHA.

## Reproductive toxicity

no data available

#### Specific target organ toxicity - single exposure

no data available

## Specific target organ toxicity - repeated exposure

no data available

#### **Aspiration hazard**

no data available

#### **Additional Information**

RTECS: Not available

spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache

Sigma-Aldrich - 223697 Page 5 of 7

## 12. ECOLOGICAL INFORMATION

#### 12.1 Toxicity

no data available

#### 12.2 Persistence and degradability

no data available

### 12.3 Bioaccumulative potential

no data available

## 12.4 Mobility in soil

no data available

#### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects

no data available

#### 13. DISPOSAL CONSIDERATIONS

## 13.1 Waste treatment methods

#### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

## Contaminated packaging

Dispose of as unused product.

## 14. TRANSPORT INFORMATION

DOT (US)

UN number: 2509 Class: 8 Packing group: II

Proper shipping name: Potassium hydrogen sulfate

Reportable Quantity (RQ): Marine pollutant: No

Poison Inhalation Hazard: No

**IMDG** 

UN number: 2509 Class: 8 Packing group: II EMS-No: F-A, S-B

Proper shipping name: POTASSIUM HYDROGEN SULPHATE

Marine pollutant: No

**IATA** 

UN number: 2509 Class: 8 Packing group: II

Proper shipping name: Potassium hydrogen sulphate

#### 15. REGULATORY INFORMATION

## **SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

#### **SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### SARA 311/312 Hazards

Acute Health Hazard

## **Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

#### Pennsylvania Right To Know Components

CAS-No. Revision Date

Sigma-Aldrich - 223697 Page 6 of 7

Potassium hydrogensulphate 7646-93-7 2007-03-01 Dipotassium disulphate 7790-62-7

**New Jersey Right To Know Components** 

Potassium hydrogensulphate CAS-No. Revision Date 7646-93-7 2007-03-01 Dipotassium disulphate 7790-62-7

## California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## 16. OTHER INFORMATION

#### Full text of H-Statements referred to under sections 2 and 3.

Eye Dam. Serious eye damage

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage. H335 May cause respiratory irritation.

Skin Corr. Skin corrosion

STOT SE Specific target organ toxicity - single exposure

**HMIS Rating** 

Health hazard: 3
Chronic Health Hazard: Flammability: 0
Physical Hazard 0

**NFPA Rating** 

Health hazard: 3
Fire Hazard: 0
Reactivity Hazard: 0

#### **Further information**

Copyright 2014 Sigma-Aldrich Co. LLC. License granted to make unlimited paper copies for internal use only. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

## **Preparation Information**

Sigma-Aldrich Corporation Product Safety – Americas Region 1-800-521-8956

Version: 5.1 Revision Date: 07/02/2014 Print Date: 02/16/2018

Sigma-Aldrich - 223697 Page 7 of 7