

**Potassium Hydrogen Sulphate  
CAS No 7646-93-7**

**MATERIAL SAFETY DATA SHEET  
SDS/MSDS**

**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

**1.1 Product identifiers**

Product name : Potassium Hydrogen Sulphate

CAS-No. : 7646-93-7

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

Identified uses : Laboratory chemicals, Industrial & for professional use only.

**1.3 Details of the supplier of the safety data sheet**

Company : Central Drug House (P) Ltd  
7/28 Vardaan House  
New Delhi-10002  
INDIA

Telephone : +91 11 49404040  
Email : [care@cdhfinechemical.com](mailto:care@cdhfinechemical.com)

**1.4 Emergency telephone number**

Emergency Phone # : +91 11 49404040 (9:00am - 6:00 pm) [Office hours]

**2. HAZARDS IDENTIFICATION**

**2.1 Classification of the substance or mixture**

**Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]**

Skin corrosion (Category 1B)

Specific target organ toxicity - single exposure (Category 3)

**Classification according to EU Directives 67/548/EEC or 1999/45/EC**

Causes burns. Irritating to respiratory system.

**2.2 Label elements**

**Labelling according Regulation (EC) No 1272/2008 [CLP]**

Pictogram



Signal word

Danger Skin Irritation Corrosive to metals

Hazard statement(s)

H314

Causes severe skin burns and eye damage.

H335

May cause respiratory irritation.

Precautionary statement(s)

P261

Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P280

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

P305 + P351 + P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.

P310

Supplemental Hazard Statements

none

**According to European Directive 67/548/EEC as amended.**  
Hazard symbol(s)



R-phrase(s)

R34

R37

Causes burns.

Irritating to respiratory system.

S-phrase(s)

S26

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39

S45

Wear suitable protective clothing, gloves and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

## 2.3 Other hazards - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

Synonyms : Potassium hydrogen sulfate

Formula :  $\text{HKO}_4\text{S}$

Molecular Weight : 136,16 g/mol

Component

Concentration

#### Potassium hydrogensulphate

CAS-No. 7646-93-7

EC-No. 231-594-1

Index-No. 016-056-00-4

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## 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.

#### 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.

#### 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

Cough, Shortness of breath, Headache, Nausea, Vomiting

### 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.

## 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 vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

### 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.

### 7.2 Conditions for safe storage, including any incompatibilities

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

hygroscopic

### 7.3 Specific end use(s)

no data available

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

Components with workplace control parameters

### 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.

### **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).

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

### **9.1 Information on basic physical and chemical properties**

- |   |                                    |
|---|------------------------------------|
| a) Appearance                                   | Form: solid                        |
| b) Odour  | no data available                  |
| c) Odour Threshold                              | no data available                  |
| d) pH   | no data available                  |
| e) Melting point/freezing point                 | Melting point/range: 214 °C - lit. |
| f) Initial boiling point and boiling range      | no data available                  |
| g) Flash point                                  | not applicable                     |
| h) Evaporation rate                             | no data available                  |
| i) Flammability (solid, gas)                    | no data available                  |
| j) Upper/lower flammability or explosive limits | no data available                  |
| k) Vapour pressure                              | no data available                  |
| l) Vapour density                               | no data available                  |
| m) Relative density                             | 2,32 g/cm <sup>3</sup> at 25 °C    |
| n) Water solubility                             | no data available                  |
| o) Partition coefficient: n-octanol/water       | no data available                  |
| p) Auto-ignition temperature                    | no data available                  |
| q) Decomposition temperature                    | no data available                  |
| r) Viscosity                                    | no data available                  |
| s) Explosive properties                         | no data available                  |
| t) 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**

no data available

### **10.3 Possibility of hazardous reactions**

no data available

#### 10.4 Conditions to avoid

Avoid moisture.

#### 10.5 Incompatible materials

Strong bases, Strong oxidizing agents, Alcohols

#### 10.6 Hazardous decomposition products

Other decomposition products - no data available

### 11. TOXICOLOGICAL INFORMATION

#### 11.1 Information on toxicological effects

##### Acute toxicity

LD50 Oral - rat - 2.340 mg/kg

##### Skin corrosion/irritation

no data available

##### Serious eye damage/eye irritation

no data available

##### Respiratory or skin sensitization

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.

##### Reproductive toxicity

no data available

##### Specific target organ toxicity - single exposure

May cause respiratory irritation.

##### Specific target organ toxicity - repeated exposure

no data available

##### Aspiration hazard

no data available

##### Potential health effects

###### Inhalation

May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. Causes respiratory tract irritation.

###### Ingestion

May be harmful if swallowed. Causes burns.

###### Skin

May be harmful if absorbed through skin. Causes skin burns.

###### Eyes

Causes eye burns.

##### Signs and Symptoms of Exposure

Cough, Shortness of breath, Headache, Nausea, Vomiting

##### Additional Information

RTECS: TS7200000

### 12. ECOLOGICAL INFORMATION

#### 12.1 Toxicity

Toxicity to fish LC50 - Leuciscus idus (Golden orfe) - 3.500 mg/l

Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 1.310 mg/l

## 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

no data available

## 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. 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

### 14.1 UN number

ADR/RID: 2509

IMDG: 2509

IATA: 2509

### 14.2 UN proper shipping name

ADR/RID: POTASSIUM HYDROGEN SULPHATE

IMDG: POTASSIUM HYDROGEN SULPHATE

IATA: Potassium hydrogen sulphate

### 14.3 Transport hazard class(es)

ADR/RID: 8

IMDG: 8

IATA: 8

### 14.4 Packaging group

ADR/RID: II

IMDG: II

IATA: II

### 14.5 Environmental hazards

ADR/RID: no

IMDG Marine Pollutant: no

IATA: no

### 14.6 Special precautions for user

no data available

## 15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

no data available

### 15.2 Chemical Safety Assessment

no data available

## 16. OTHER INFORMATION

### Further information

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. Central Drug House (P) Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.cdhfinechemical.com](http://www.cdhfinechemical.com) for additional terms and conditions of sale.