

### SECTION 1: Identification

#### 1.1. Product identifier

Trade name : POTASSIUM SULFATE  
 IUPAC name : potassium sulfate  
 EC-No. : 231-915-5  
 CAS-No. : 7778-80-5  
 Product code : 116185xxx  
 Formula : K<sub>2</sub>SO<sub>4</sub>

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

Recommended uses and restrictions : For laboratory use only

#### 1.3. Supplier's details

Labchem (Pty)Ltd  
 6 Wakefield Road  
 Founders Hill  
 1609 Johannesburg - South Africa  
 T +27 11 452 1116 - F +27 86 588 0293  
[techlab@labchem.co.za](mailto:techlab@labchem.co.za) - [www.labchem.co.za](http://www.labchem.co.za)

#### 1.4. Emergency telephone number

Emergency number : +27 11 452 1116

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to the United Nations GHS

Serious eye damage/eye irritation, H318  
 Category 1  
 Hazardous to the aquatic environment -  
 Acute Hazard Not classified  
 Full text of H statements : see section 16

#### 2.2. Label elements

##### Labelling according to the United Nations GHS

Hazard pictograms (GHS-ZA) :



GHS05

Signal word (GHS-ZA) : Danger  
 Hazard statements (GHS-ZA) : H318 - Causes serious eye damage.  
 Precautionary statements (GHS-ZA) : 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.  
 P310 - Immediately call a POISON CENTER or doctor.

#### 2.3. Other hazards

Adverse physicochemical, human health and environmental effects : Causes serious eye irritation, Causes serious eye damage.

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

IUPAC name : potassium sulfate

Substance identification codes: See section 1.1

Name	Product identifier	%	Classification according to the United Nations GHS
potassium sulfate (Main constituent)	(CAS-No.) 7778-80-5	≥ 98.5	Eye Dam. 1, H318 Aquatic Acute Not classified

Full text of H-statements: see section 16

#### 3.2. Mixtures

Not applicable

# POTASSIUM SULFATE

## Safety Data Sheet

According to SANS 10234:2019 and SANS 11014:2010

### 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.
- First-aid measures after skin contact : Wash skin with plenty of water.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
- First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

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

- Symptoms/effects after eye contact : Eye irritation. Serious damage to eyes.

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

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

- Suitable extinguishing media : Water spray. Dry powder. Foam.

#### 5.2. Special hazards arising from the substance or mixture

- Hazardous decomposition products in case of fire : Toxic fumes may be released.

#### 5.3. Advice for firefighters

- 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

No additional information available

##### 6.1.1. For non-emergency personnel

- Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes.

##### 6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

#### 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Mechanically recover the product.
- Other information : Dispose of materials or solid residues at an authorized site.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment.
- 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 : Store in a well-ventilated place. Keep cool.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

No additional information available

#### 8.2. Appropriate engineering controls

- Appropriate engineering controls : Ensure good ventilation of the work station.
- Environmental exposure controls : Avoid release to the environment.

#### 8.3. Individual protection measures, such as personal protective equipment (PPE)

- Hand protection : Protective gloves
- Eye protection : Safety glasses
- Skin and body protection : Wear suitable protective clothing
- Respiratory protection : Dust production: dust mask with filter type P1

**Personal protective equipment symbol(s):**

# POTASSIUM SULFATE

## Safety Data Sheet

According to SANS 10234:2019 and SANS 11014:2010



### 8.4. Exposure limit values for the other components

No additional information available

## SECTION 9: Physical and chemical properties

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

Physical state	: Solid
Appearance	: No data available
Molecular mass	: 174.26 g/mol
Colour	: No data available
Odour	: No data available
Odour threshold	: No data available
pH	: $\approx 7$ Temp.: 25 °C
pH solution	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Relative evaporation rate (ether=1)	: No data available
Melting point	: 1067 °C
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable.
Vapour pressure	: No data available
Vapour pressure at 50 °C	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Relative density of saturated gas/air mixture	: No data available
Density	: 2.66 g/cm <sup>3</sup> Type: 'density'
Relative gas density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Partition coefficient n-octanol/water (Log Kow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: Not applicable
Lower explosive limit (LEL)	: No data available
Upper explosive limit (UEL)	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

# POTASSIUM SULFATE

## Safety Data Sheet

According to SANS 10234:2019 and SANS 11014:2010

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 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

#### POTASSIUM SULFATE (7778-80-5)

LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal)), Guideline: EPA OPPTS 870.1200 (Acute Dermal Toxicity), Guideline: other:Japanese Ministry of Agriculture, Forestry and Fisheries (JMAFF), 12 Nousan, Notification No 8147, November 2000; including the most recent partial revisions.

Skin corrosion/irritation : Not classified

pH: ≈ 7 Temp.: 25 °C

Serious eye damage/irritation : Causes serious eye damage.

pH: ≈ 7 Temp.: 25 °C

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

#### POTASSIUM SULFATE (7778-80-5)

NOAEL (chronic, oral, animal/male, 2 years)	256 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies), Remarks on results: other:Effect type: toxicity (migrated information)
NOAEL (chronic, oral, animal/female, 2 years)	284 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies), Remarks on results: other:Effect type: toxicity (migrated information)

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short-term (acute) : Not classified.

Hazardous to the aquatic environment, long-term (chronic) : Not classified

#### POTASSIUM SULFATE (7778-80-5)

LC50 fish 1	680 mg/l Test organisms (species): Pimephales promelas
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### 12.2. Persistence and degradability

#### POTASSIUM SULFATE (7778-80-5)

Persistence and degradability	No additional information available
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### 12.3. Bioaccumulative potential

#### POTASSIUM SULFATE (7778-80-5)

Bioaccumulative potential	No additional information available
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### 12.4. Mobility in soil

#### POTASSIUM SULFATE (7778-80-5)

Mobility in soil	No additional information available
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# POTASSIUM SULFATE

## Safety Data Sheet

According to SANS 10234:2019 and SANS 11014:2010

### 12.5. Other adverse effects

Ozone : Not classified  
Other adverse effects : No additional information available

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

## SECTION 14: Transport information

In accordance with SANS / IMDG / IATA

SANS	IMDG	IATA
<b>14.1. UN number</b>		
Not regulated for transport		
<b>14.2. Proper Shipping Name</b>		
Not applicable	Not applicable	Not applicable
<b>14.3. Transport hazard class(es)</b>		
Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable
<b>14.4. Packing group</b>		
Not applicable	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>		
Dangerous for the environment : No	Dangerous for the environment : No :	Dangerous for the environment : No
No supplementary information available		

### 14.6. Special precautions for user

#### - SANS

No data available

#### - IMDG

No data available

#### - IATA

No data available

### 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. Safety, health, and environmental national regulations specific for the product

Regulatory reference : SANS 10234:2008; SANS 11014:2010; SANS 10228:2012; SANS 10229:2010; SANS 10232(1,2,4), SANS 10231:2018; Occupational Health and Safety Act 85 of 1993; National Road Traffic Act 93 of 1996.

## SECTION 16: Other information

Issue date : 02/07/2020  
Revision date : 02/07/2025

Full text of H-statements:

H318

Causes serious eye damage.

SDS South Africa

*The data provided in this Safety Data Sheet (SDS) is correct to the best of our knowledge. The data relates to the specific product as named and is intended as a guide to the safe handling of the product in all its facets. The data may no longer be valid if the product is used in any process or in combination with other products. This SDS is not a quality specification nor any form of guarantee.*