

### SECTION 1: Identification

#### 1.1. Product identifier

Trade name : POTASSIUM CHLORIDE  
 IUPAC name : potassium chloride  
 EC-No. : 231-211-8  
 CAS-No. : 7447-40-7  
 Product code : 116090xxx  
 Formula : KCl

#### 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

Acute toxicity (oral), Category 5 H303

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

Signal word (GHS-ZA) : Warning  
 Hazard statements (GHS-ZA) : H303 - May be harmful if swallowed  
 Precautionary statements (GHS-ZA) : P312 - Call a POISON CENTER or doctor if you feel unwell.

#### 2.3. Other hazards

Adverse physicochemical, human health and environmental effects : Harmful if swallowed.

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

IUPAC name : potassium chloride

Substance identification codes: See section 1.1

| Name                                     | Product identifier  | %    | Classification according to the United Nations GHS        |
|--|---------------------|------|---|
| potassium chloride<br>(Main constituent) | (CAS-No.) 7447-40-7 | ≥ 99 | Acute Tox. 5 (Oral), H303<br>Aquatic Acute Not classified |

Full text of H-statements: see section 16

#### 3.2. Mixtures

Not applicable

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures general : Call a poison center or a doctor if you feel unwell.  
 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 eyes with water as a precaution.  
 First-aid measures after ingestion : Rinse mouth. Call a poison center or a doctor if you feel unwell.

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According to SANS 10234:2008 and SANS 11014:2010

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

No additional information available

### 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.

#### 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. 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 : In case of insufficient ventilation, wear suitable respiratory equipment

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



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

No additional information available

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According to SANS 10234:2008 and SANS 11014:2010

### SECTION 9: Physical and chemical properties

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

|   |                                  |
|---|----------------------------------|
| Physical state                                  | : Solid                          |
| Appearance                                      | : Crystalline solid.             |
| Molecular mass                                  | : 74.5513 g/mol                  |
| Colour  | : white.                         |
| Odour   | : odourless.                     |
| Odour threshold                                 | : No data available              |
| pH  | : No data available              |
| pH solution                                     | : No data available              |
| Relative evaporation rate (butylacetate=1)      | : No data available              |
| Relative evaporation rate (ether=1)             | : No data available              |
| Melting point                                   | : 770 °C                         |
| Freezing point                                  | : Not applicable                 |
| Boiling point                                   | : 1420 °C                        |
| 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                                | : 1.984 Type: 'relative density' |
| Relative density of saturated gas/air mixture   | : No data available              |
| Density   | : No data available              |
| Relative gas density                            | : No data available              |
| Solubility                                      | : Water: 355 g/l (25°C)          |
| 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).

#### 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) : May be harmful if swallowed.

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According to SANS 10234:2008 and SANS 11014:2010

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

### POTASSIUM CHLORIDE (7447-40-7)

LD50 oral rat ≈ 3020 mg/kg bodyweight Animal: rat, Animal sex: female

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

### POTASSIUM CHLORIDE (7447-40-7)

NOAEL (chronic, oral, animal/male, 2 years) ≈ 1820 mg/kg bodyweight Animal: rat, Animal sex: male, Remarks on results: other:Effect type: toxicity (migrated information)

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

### POTASSIUM CHLORIDE (7447-40-7)

NOAEL (oral, rat, 90 days) ≈ 1820 mg/kg bodyweight Animal: rat, Animal sex: male

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 CHLORIDE (7447-40-7)

LC50 fish 1 880 mg/l Test organisms (species): Pimephales promelas

EC50 other aquatic organisms 1 440 – 880 mg/l Test organisms (species): other:see below

EC50 other aquatic organisms 2 580 – 670 mg/l Test organisms (species): other:see below

EC50 72h algae (1) > 100 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)

### 12.2. Persistence and degradability

#### POTASSIUM CHLORIDE (7447-40-7)

Persistence and degradability No additional information available

### 12.3. Bioaccumulative potential

#### POTASSIUM CHLORIDE (7447-40-7)

Bioaccumulative potential No additional information available

### 12.4. Mobility in soil

#### POTASSIUM CHLORIDE (7447-40-7)

Mobility in soil No additional information available

### 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

#### 14.1. UN number

Not regulated for transport

# POTASSIUM CHLORIDE

## Safety Data Sheet

According to SANS 10234:2008 and SANS 11014:2010

| SANS                                    | IMDG                                    | IATA                               |
|---|---|------------------------------------|
| <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<br>: | 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 : 07/02/2020

Revision date : 07/02/2025

Full text of H-statements:

|      |                             |
|------|-----------------------------|
| H303 | May be harmful if swallowed |
|------|-----------------------------|

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.*