

Safety Data Sheet (SDS)

Product Name: Potassium Chloride

CAS Number: 7447-40-7

EC Number: 231-211-8

Molecular Formula: KCl

Molecular Weight: 74.55 g/mol

1. Identification

Product identifier

Potassium Chloride

Synonyms

Potassium chloride

KCl

Muriate of potash

Recommended use

Laboratory chemical, analytical reagent, calibration material, technical compound for research and laboratory use.

Supplier

Rexar

Genestetstraat 3

2394 XK Hazerswoude Rijndijk

Netherlands

info@rexar.nl

2. Hazard Identification

Classification according to Regulation (EC) No. 1272/2008 (CLP)

Not classified as hazardous according to CLP criteria.

Label elements

No hazard pictogram required.

Signal word

None

Hazard statements

None

Precautionary statements

P264 Wash hands thoroughly after handling.

P280 Wear appropriate protective equipment when handling laboratory chemicals.
P270 Do not eat, drink or smoke when using this product.

3. Composition / Information on Ingredients

Substance

Potassium Chloride

CAS Number

7447-40-7

EC Number

231-211-8

Purity

Typically $\geq 99\%$

4. First Aid Measures

General advice

Remove contaminated clothing. Seek medical advice if symptoms persist.

Inhalation

Move person to fresh air. Seek medical attention if irritation develops.

Skin contact

Wash skin thoroughly with soap and water.

Eye contact

Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

Ingestion

Rinse mouth with water. Seek medical advice if discomfort occurs.

5. Fire Fighting Measures

Suitable extinguishing media

Water spray, dry chemical powder, carbon dioxide or foam.

Specific hazards

Thermal decomposition may produce potassium oxides and hydrogen chloride.

Protective equipment

Firefighters should wear appropriate protective equipment and self-contained breathing apparatus.

6. Accidental Release Measures**Personal precautions**

Use appropriate personal protective equipment. Avoid dust formation.

Environmental precautions

Prevent large quantities from entering drains or waterways.

Methods for cleanup

Sweep up material carefully and place in suitable container for disposal.

7. Handling and Storage**Handling**

Handle in accordance with good laboratory practice. Avoid unnecessary dust formation.

Storage

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

8. Exposure Controls / Personal Protection**Engineering controls**

Use adequate ventilation.

Personal protective equipment**Eye protection**

Safety glasses or chemical splash goggles

Skin protection

Protective gloves

Respiratory protection

Dust mask recommended when dust is generated.

9. Physical and Chemical Properties

Appearance

White crystalline powder or crystals

Odor

Odorless

Melting point

770 °C

Boiling point

1413 °C

Density

1.984 g/cm³

Solubility

330 g/L in water (20 °C)

10. Stability and Reactivity**Stability**

Stable under recommended storage conditions.

Conditions to avoid

Excessive heat and moisture exposure.

Incompatible materials

Strong oxidizing agents.

Hazardous decomposition products

Potassium oxides and hydrogen chloride.

11. Toxicological Information**Acute toxicity**

Not classified as acutely toxic at typical laboratory exposure levels.

Skin irritation

May cause mild irritation through prolonged exposure.

Eye irritation

Dust may cause mechanical irritation.

12. Ecological Information

Ecotoxicity

No significant environmental hazard expected at typical laboratory quantities.

Persistence and degradability

Naturally occurring inorganic salt.

13. Disposal Considerations

Dispose of material in accordance with local, regional and national regulations through licensed chemical waste handlers.

14. Transport Information**UN number**

Not regulated for transport.

Transport hazard class

Not classified as dangerous goods for ADR, IMDG or IATA.

15. Regulatory Information

Classification according to EU CLP Regulation (EC) No. 1272/2008.

Not classified as hazardous.

16. Other Information

This Safety Data Sheet is provided for laboratory safety guidance.

The product is supplied as a chemical substance for analytical, technical or research applications only.

Not intended for human or animal consumption or for medical use.