

Material Safety Data Sheet

Date Printed: 10/MAY/2005

Date Updated: 05/NOV/2004

Version 1.4

According to 91/155/EEC

1 - Product and Company Information

Product Name POTASSIUM CHLORIDE, 99.999%
Product Number 409316

Company Sigma-Aldrich Pty, Ltd
Unit 2, 14 Anella Avenue
Castle Hill NSW 1765
Australia

Technical Phone # +61 2 9841 0555

Fax +61 2 9841 0500

Emergency Phone # +61 2 9841 0566

2 - Composition/Information on Ingredients

Product Name	CAS #	EC no	Annex I Index Number
POTASSIUM CHLORIDE	7447-40-7	231-211-8	None

Formula KCl

Molecular Weight 74.56 AMU

Synonyms Potassium chloride * Chlorid draselny (Czech) *
Chloropotassuril * Dipotassium dichloride *
Emplets potassium chloride * Enseal * Kalitabs *
Kaochlor * Kaon-Cl * Kaon-Cl 10 * Kaon-Cl TABS *
Kay ciel * Klotrix * K-Lyte/Cl * K-Lor *
K-Predne-dome * Monopotassium chloride * Pfiklor
* Potassium monochloride * Potavescent * Rekawan
* Slow K * Tripotassium trichloride

3 - Hazards Identification

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT

Not hazardous according to Directive 67/548/EC.

4 - First Aid Measures

AFTER INHALATION

If inhaled, remove to fresh air. If breathing becomes difficult,
call a physician.

AFTER SKIN CONTACT

In case of contact, immediately wash skin with soap and copious
amounts of water.

AFTER EYE CONTACT

In case of contact with eyes, flush with copious amounts of
water for at least 15 minutes. Assure adequate flushing by
separating the eyelids with fingers. Call a physician.

AFTER INGESTION

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

5 - Fire Fighting Measures

EXTINGUISHING MEDIA

Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

SPECIAL RISKS

Specific Hazard(s): Emits toxic fumes under fire conditions.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6 - Accidental Release Measures

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation of dust.

METHODS FOR CLEANING UP

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

7 - Handling and Storage

HANDLING

Directions for Safe Handling: Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

STORAGE

Conditions of Storage: Keep tightly closed.

SPECIAL REQUIREMENTS: Hygroscopic.

8 - Exposure Controls / Personal Protection

ENGINEERING CONTROLS

Safety shower and eye bath. Mechanical exhaust required.

GENERAL HYGIENE MEASURES

Wash thoroughly after handling. Wash contaminated clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Wear dust mask.

Hand Protection: Protective gloves.

Eye Protection: Chemical safety goggles.

9 - Physical and Chemical Properties

pH	7
BP/BP Range	1,500 °C
MP/MP Range	770 °C
Flash Point	N/A
Flammability	N/A
Autoignition Temp	N/A
Oxidizing Properties	N/A

Explosive Properties	N/A
Explosion Limits	N/A
Vapor Pressure	N/A
SG/Density	1.98 g/cm3
Partition Coefficient	N/A
Viscosity	N/A
Vapor Density	N/A
Saturated Vapor Conc.	N/A
Evaporation Rate	N/A
Bulk Density	N/A
Decomposition Temp.	N/A
Solvent Content	N/A
Water Content	N/A
Surface Tension	N/A
Conductivity	N/A
Miscellaneous Data	N/A
Solubility	Solubility in Water:Soluble.

10 - Stability and Reactivity

STABILITY

Stable: Stable.

Conditions to Avoid: Moisture.

Materials to Avoid: Strong acids, Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Hydrogen chloride gas, Potassium oxides.

HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

11 - Toxicological Information

RTECS NUMBER: TS8050000

ACUTE TOXICITY

LDLO

Oral

Infant

938 mg/kg

2D

Remarks: Lungs, Thorax, or Respiration:Cyanosis. Lungs, Thorax, or Respiration:Other changes. Nutritional and Gross Metabolic:Changes in:K

LDLO

Oral

Man

20 mg/kg

Remarks: Cardiac:Arrhythmias (including changes in conduction). Gastrointestinal:Nausea or vomiting. Blood:Change in clotting factors.

LD50

Oral

Rat

2600 mg/kg

LD50

Intraperitoneal

Rat
660 MG/KG

LD50
Intravenous
Rat

142 MG/KG

Remarks: Behavioral:Convulsions or effect on seizure threshold.
Lungs, Thorax, or Respiration:Dyspnea.

LD50
Oral
Mouse
1500 mg/kg

LD50
Intraperitoneal
Mouse
620 MG/KG

LD50
Intravenous
Mouse
117 MG/KG

IRRITATION DATA

Eyes
Rabbit
500 mg
24H
Remarks: Mild irritation effect

SIGNS AND SYMPTOMS OF EXPOSURE

Hyperkalaemia, nausea, vomiting, abdominal pain, diarrhea or constipation, paraesthesia, thirst, dizziness, skin rash, pruritus, weakness, muscle cramps, and minor psychiatric or visual changes. ORL-mus LD50: 56 mg/kg * ORL-rat LD50: 36 to 85 mg/kg (depending on strain)

ROUTE OF EXPOSURE

Skin Contact: May cause skin irritation.
Skin Absorption: May be harmful if absorbed through the skin.
Eye Contact: May cause eye irritation.
Inhalation: May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.
Ingestion: May be harmful if swallowed.

CHRONIC EXPOSURE - MUTAGEN

Rat
1500 UG/KG
Oral
Unscheduled DNA synthesis

Mouse
2048 MG/L (+S9)
Cell Type: lymphocyte
Mutation in microorganisms

Hamster
260 MMOL/L

Cell Type: ovary
DNA damage

Hamster
12 GM/L
Cell Type: lung
Cytogenetic analysis

Hamster
140 MMOL/L
Cell Type: ovary
Cytogenetic analysis

Hamster
180 MMOL/L
Cell Type: ovary
Sister chromatid exchange

12 - Ecological Information

No data available.

13 - Disposal Considerations

SUBSTANCE DISPOSAL

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. Observe all federal, state, and local environmental regulations.

14 - Transport Information

RID/ADR

Non-hazardous for road transport.

IMDG

Non-hazardous for sea transport.

IATA

Non-hazardous for air transport.

15 - Regulatory Information

CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES

S-PHRASES: 22 24/25

Do not breathe dust. Avoid contact with skin and eyes.

Not hazardous according to Directive 67/548/EC.

COUNTRY SPECIFIC INFORMATION

Germany

WGK: 1

SWITZERLAND

SWISS POISON CLASS: 5

16 - Other Information

WARRANTY

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 Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2005 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

DISCLAIMER

For R&D use only. Not for drug, household or other uses.