



Material Safety Datasheet

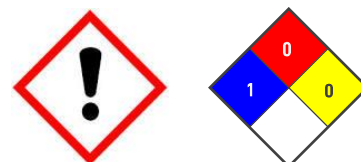
POTASSIUM CHLORIDE**1. DESCRIPTION****Trade Name:** POTASSIUM CHLORIDE**Chemical Class:** Mineral Salt**Chemical Name:** Potassium Chloride, KCL**Application:** Fertilizer industry. Drilling fluid industry. Amalgam and membrane process. Electro-galvanizing.**Supplier:** TEAM Chemicals**Telephone:** +44 (0)207 408 7700 - +98 912 3717539**Address:** No. 43, Souri St., 43 Ashrafi Esfahani Expressway**2. COMPOSITION / INFORMATION ON INGREDIENTS****Ingredients**

NAME	CAS RN	INT HAZ	%
Potassium chloride	7447-40-7	None	>95

3. HAZARD IDENTIFICATION**Potential Acute Health Effects:****SWALLOWED** Accidental ingestion of the material may be damaging to the health of the individual. Considered an unlikely route of entry in commercial/industrial environments.**EYE** Limited evidence exists, or practical experience suggests, that the material may cause eye irritation in a substantial number of individuals and/or is expected to produce significant ocular lesions which are present twenty-four hours or more after instillation into the eye(s) of experimental animals. Repeated or prolonged eye contact may cause inflammation characterized by temporary redness (similar to windburn) of the conjunctiva (conjunctivitis); temporary impairment of vision and/or other transient eye damage/ulceration may occur.**SKIN** The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting. Not considered to cause discomfort through normal use.**INHALED** The material is not thought to produce adverse health effects or irritation of the respiratory tract

**Potential Chronic Health Effects:**

Indicators are that short term exposure to the material by all routes is not harmful. Principal routes of exposure are usually by inhalation of generated dust and skin contact with the material. Prolonged or repeated skin contact may cause drying with cracking, irritation and possible dermatitis following. The material is generally regarded as being of very low toxicity and is used routinely as a food additive. Ingestion of large quantities of the material may produce weakness and circulatory problems. Persons with impaired kidney function may be more susceptible to the effects of the substance.

Irritant Yes **Flammable** No**Carcinogenic** No **Oxidant** No**Explosive** No **Environmental Hazard** No**Corrosive** No**(Risk-Phrases)** R-36**(Safety-Phrases)** S-26, S-39**4. FIRST AID MEASURES****Eye Contact:**

If this product comes in contact with the eyes:

- Wash out immediately with fresh running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.

Skin Contact:

If this product comes in contact with the eyes:

- Wash out immediately with fresh running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.

Inhalation:

If dust is inhaled, remove from contaminated area.

- Encourage patient to blow nose to ensure clear breathing passages.

Ingestion:

- If swallowed do NOT induce vomiting.
- If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.
- Observe the patient carefully.
- Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.



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5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA There is no restriction on the type of extinguisher which may be used.

FIRE FIGHTING Alert Fire Brigade and tell them location and nature of hazard.

- Wear breathing apparatus plus protective gloves for fire only.
- Prevent, by any means available, spillage from entering drains or water courses.
- Use fire fighting procedures suitable for surrounding area.
- DO NOT approach containers suspected to be hot.

FIRE/EXPLOSION HAZARD Non combustible

FIRE INCOMPATIBILITY Not determined

PERSONAL PROTECTION

Glasses: Safety Glasses.

Chemical goggles.

Gloves:

Respirator: Particulate

6. ACCIDENTAL RELEASE MEASURES

Small Spill:

- Clean up all spills immediately.
- Avoid contact with skin and eyes.
- Wear impervious gloves and safety glasses.
- Use dry clean up procedures and avoid generating dust.

Large Spill: Clear area of personnel and move upwind.

Alert Fire Brigade and tell them location and nature of hazard.

Control personal contact by using protective equipment and dust respirator.

Prevent spillage from entering drains, sewers or water courses.

Recover product wherever possible. Avoid generating dust.

Sweep/ shovel up.

7. HANDLING AND STORAGE

HANDLING Precautions: Do not ingest. Do not breathe dust. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, acids, moisture.

Storage Precautions: Keep container tightly closed. Keep container in a cool, well-ventilated area.



8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE CONTROLS

Ingredient	CAS
potassium	7447-40-7 CAS:12599-00-7 CAS:59217-68-4 CAS:79103-76-7
chloride	126415-35-8

PERSONAL PROTECTION

RESPIRATOR Respiratory protection must be used if air contamination exceeds acceptable level.

EYE Wear general protective gloves: i.e. Disposable polythene gloves or Cotton gloves or Light weight rubber gloves, with Barrier cream preferably Safety footwear.

HAND/FEET Wear general protective gloves: i.e. Disposable polythene gloves or Cotton gloves or Light weight rubber gloves, with Barrier cream preferably Safety footwear.

OTHER

- Overalls.
- Eyewash unit

ENGINEERING CONTROLS

None required when handling small quantities.

OTHERWISE: Use in a well-ventilated area.

Local exhaust ventilation is required where solids are handled as powders or crystals; even when particulates are relatively large, a certain proportion will be powdered by mutual friction.

9. PHYSICAL & CHEMICAL PROPERTIES

Physical state and appearance: Powder

Color: Pink to white

Odor: Odorless

pH: 9-10.5

Boiling Point: Not applicable

K₂O: >60%

Melting/Freezing Point: Not applicable

Specific Gravity: 1.98

Solubility (Water): Soluble in hot and cold water



10. STABILITY & REACTIVITY

Chemical Stability: Stable

Conditions to Avoid: Incompatible materials.

Materials to Avoid: Not determined

Special Remarks on Reactivity: Reactive with oxidizing agents, acids.

Hygroscopic. Incompatible with KMnO_4 , H_2SO_4 , BrF_3 , and BrCl_3 . May react violently with BrF_3 .

Special Remarks on Corrosivity: Non-corrosive

11. TOXICOLOGICAL INFORMATION

Toxicity to animals: Acute oral toxicity (LD50): 1500 mg/kg [Mouse].

Chronic Effects on Humans: May cause damage to the following organs: blood, cardiovascular system.

Special Remarks on other Toxic Effects on Humans: Acute Potential Health Effects: Skin: May cause skin irritation
Eye: Dust may cause eye irritation. Inhalation: Dust may cause respiratory tract irritation. Low hazard for usual industrial handling Ingestion: May affect behavior (coma, change in motor activity, listlessness, vertigo, mental confusion, paresthesia's, general weakness, flaccid paralysis), metabolism, blood (change in clotting factor, electrolytic imbalance), cardiovascular (hypotension, circulatory disturbances, cardiac arrhythmias, heart block), and respiratory, gastrointestinal (irritation of GI tract, nausea, vomiting, diarrhea, abdominal discomfort, purging), and urinary(impairment of renal function) systems. Acute potassium intoxication by mouth is rare because large single doses usually induce vomiting, and because in the absence of pre-existing kidney damage potassium is rapidly excreted. Maximal nontoxic oral dose of KCl in man varies from 0.2g to 1 g of potassium/kg/day depending upon efficiency of individual excretory mechanism; lower doses sometimes cause impairment of renal function as shown by reduced inulin, and urea clearance.



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12. ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: Contact TEAM Environmental Affairs for ecological data.

Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic.

13. DISPOSAL CONSIDERATION

WASTE MANAGEMENT: Not Determined

DISPOSAL METHODS: Waste must be disposed of in accordance with federal, state and local environmental control regulations.

14. TRANSPORT INFORMATION

U.S. DOT Not determined

U.S. DOT CLASS: Not determined

Shipping Description: The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

15. REGULATORY INFORMATION

Classification: Toxicity: refer to section 11 and 12.

Poisons Schedule (SUSMP): None allocated.

This material is listed on the international standard such as OHSAS 18001:2007.



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16. ADDITIONAL INFORMATION

3 Yearly Revised Primary MSDS

Update in Toxicological Information

Update in Ecological Information

This MSDS summaries to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. TEAM cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.



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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. TEAM Chemicals and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.

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