MSDS Number: **P5631** * * * * * *Effective Date:* ***10/22/04*** * * * * * *Supercedes:* ***05/14/03***

**MSDS** MATERIAL SAFETY DATA SHEET
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**CHEMTREC:** 800-424-9300 (USA)
703-527-3887(Outside USA and Canada)
**CANUTEC:** 613-996-6666

**From**: Mallinckrodt Baker, Inc
222 Red School Lane
Phillipsburg, NJ 08865

NOTE: Use CHEMTREC and CANUTEC phone numbers only in the event of a chemical emergency.

Emergency Telephone Number: 908-859-2151

All non-emergency questions should be directed to Customer Service (1-800-582-2537) for assistance.

**M A L L I N C K R O D T** **J. T. B A K E R**

# POTASSIUM CHLORIDE

## 1. Product Identification

**Synonyms:** Potassium monochloride
**CAS No.:** 7447-40-7
**Molecular Weight:** 74.55
**Chemical Formula:** KCl
**Product Codes:**
J.T. Baker: 3040, 3044, 3045, 3046, 3052, 4001, 4920
Mallinckrodt: 0865, 0890, 3279, 3610, 3619, 3925, 4251, 4858, 4910, 5480, 6156, 6205, 6230, 6275, 6307, 6335, 6363, 6788, 6801, 6838, 6841, 6842, 6845, 6849, 6851, 6858, 6867, 7207, 7535, 7590, 7618, 7769, V483

## 2. Composition/Information on Ingredients

```
  Ingredient                                    CAS No         Percent
Hazardous
  ----------------------------------------   ------------   ------------   ---
------
```

| | | | |
|---|---|---|---|
| Potassium Chloride | 7447-40-7 | 100% | Yes |

---

# 3. Hazards Identification

**Emergency Overview**
---
**CAUTION! MAY BE HARMFUL IF SWALLOWED. MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT.**

**SAF-T-DATA(tm)** Ratings (Provided here for your convenience)
---
Health Rating: 2 - Moderate
Flammability Rating: 0 - None
Reactivity Rating: 1 - Slight
Contact Rating: 2 - Moderate
Lab Protective Equip: GOGGLES; LAB COAT; VENT HOOD; PROPER GLOVES
Storage Color Code: Green (General Storage)
---

**Potential Health Effects**
---

**Inhalation:**
Inhalation of high concentrations of dust may cause nasal or lung irritation.
**Ingestion:**
Large quantities can produce gastrointestinal irritation and vomiting. May produce weakness and circulatory problems. May affect heart. In severe cases, ingestion may be fatal.
**Skin Contact:**
Contact may cause irritation or rash, particularly with moist skin.
**Eye Contact:**
Potassium chloride is moderate eye irritant. Redness, tearing, possible abrasion can occur.
**Chronic Exposure:**
No information found.
**Aggravation of Pre-existing Conditions:**
Persons with impaired kidney function may be more susceptible to the effects of the substance.

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# 4. First Aid Measures

**Inhalation:**
Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
**Ingestion:**

Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Call a physician.
**Skin Contact:**
Remove any contaminated clothing. Wash skin with soap and water for at least 15 minutes. Get medical attention if irritation develops or persists.
**Eye Contact:**
In case of contact, immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Call a physician if irritation persists.

---

## 5. Fire Fighting Measures

**Fire:**
Not considered to be a fire hazard.
**Explosion:**
Not considered to be an explosion hazard.
**Fire Extinguishing Media:**
Use any means suitable for extinguishing surrounding fire.
**Special Information:**
In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

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## 6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Pick up and place in a suitable container for reclamation or disposal, using a method that does not generate dust.

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## 7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

---

## 8. Exposure Controls/Personal Protection

**Airborne Exposure Limits:**
None established.

**Ventilation System:**
A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.
**Personal Respirators (NIOSH Approved):**
For conditions of use where exposure to dust or mist is apparent and engineering controls are not feasible, a particulate respirator (NIOSH type N95 or better filters) may be worn. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.
**Skin Protection:**
Wear protective gloves and clean body-covering clothing.
**Eye Protection:**
Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

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# 9. Physical and Chemical Properties

**Appearance:**
White crystals or powder.
**Odor:**
Odorless.
**Solubility:**
28.1 g/100g of water @ 0C.
**Density:**
1.987
**pH:**
ca. 7 Saturated aq. sl. @ 15C
**% Volatiles by volume @ 21C (70F):**
0
**Boiling Point:**
1500C (2732F) Sublimes.
**Melting Point:**
772C (1422F)
**Vapor Density (Air=1):**
No information found.
**Vapor Pressure (mm Hg):**
No information found.
**Evaporation Rate (BuAc=1):**
No information found.

---

# 10. Stability and Reactivity

**Stability:**
Stable under ordinary conditions of use and storage.
**Hazardous Decomposition Products:**
Oxides of the contained metal and halogen, possibly also free, or ionic halogen.
**Hazardous Polymerization:**
Will not occur.
**Incompatibilities:**
Bromine trifluoride; potassium permanganate plus sulfuric acid.
**Conditions to Avoid:**
No information found.

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# 11. Toxicological Information

Oral rat LD50: 2600 mg/kg; irritation eye rabbit (standard Draize): 500 mg/24 hr mild; investigated as a mutagen.

```
  --------\Cancer Lists\-----------------------------------------------------
-
                                          ---NTP Carcinogen---
  Ingredient                              Known    Anticipated    IARC
Category
  ------------------------------------   -----    -----------    ------------
-
  Potassium Chloride (7447-40-7)           No          No            None
```

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# 12. Ecological Information

**Environmental Fate:**
No information found.
**Environmental Toxicity:**
No information found.

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# 13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

## 14. Transport Information

Not regulated.

## 15. Regulatory Information

```
  --------\Chemical Inventory Status - Part 1\-------------------------------
--
  Ingredient                                          TSCA  EC   Japan
Australia
  ----------------------------------------------  ----  ---  -----  --------
-
  Potassium Chloride (7447-40-7)                       Yes  Yes   Yes      Yes

  --------\Chemical Inventory Status - Part 2\-------------------------------
--
                                                              --Canada--
  Ingredient                                          Korea  DSL   NDSL  Phil.
  ----------------------------------------------  -----  ---   ----  -----
  Potassium Chloride (7447-40-7)                       Yes   Yes   No     Yes

  --------\Federal, State & International Regulations - Part 1\--------------
--
                                              -SARA 302-    ------SARA 313----
--
  Ingredient                                  RQ    TPQ     List  Chemical
Catg.
  ----------------------------------------  ---   -----   ----  ------------
--
  Potassium Chloride (7447-40-7)              No    No      No         No

  --------\Federal, State & International Regulations - Part 2\--------------
--
                                                          -RCRA-    -TSCA-
  Ingredient                                  CERCLA     261.33     8(d)
  ----------------------------------------  ------     ------    ------
  Potassium Chloride (7447-40-7)              No         No         No


Chemical Weapons Convention:  No     TSCA 12(b):  No     CDTA:  No
SARA 311/312:  Acute: Yes      Chronic: No   Fire: No  Pressure: No
Reactivity: No          (Pure / Solid)
```

**Australian Hazchem Code:** None allocated.
**Poison Schedule:** None allocated.
**WHMIS:**

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

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# 16. Other Information

**NFPA Ratings:** Health: **1** Flammability: **0** Reactivity: **0**
**Label Hazard Warning:**
CAUTION! MAY BE HARMFUL IF SWALLOWED. MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT.
**Label Precautions:**
Avoid breathing dust.
Keep container closed.
Use with adequate ventilation.
Avoid contact with eyes, skin and clothing.
Wash thoroughly after handling.
**Label First Aid:**
If swallowed, induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. If irritation develops call a physician. If inhaled, remove to fresh air. Get medical attention for any breathing difficulty.
**Product Use:**
Laboratory Reagent.
**Revision Information:**
MSDS Section(s) changed since last revision of document include: 3.
**Disclaimer:**
**********
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**********
**Prepared by:** Environmental Health & Safety
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