

MSDS Number: **P5620** * * * * * *Effective Date: 08/10/04* * * * * * *Supersedes: 11/02/01*

MSDS **Material Safety Data Sheet**

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



24 Hour Emergency Telephone: 908-659-2151
CHEMTREC: 1-800-424-9300

National Response in Canada
CANUTEC: 613-995-6666

Outside U.S. and Canada
Chemtrec: 703-527-3887

NOTE: CHEMTREC, CANUTEC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

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

POTASSIUM CHLORATE

1. Product Identification

Synonyms: Potash chlorate; chloric acid, potassium salt; Berthollet Salt
CAS No.: 3811-04-9
Molecular Weight: 122.55
Chemical Formula: KClO3
Product Codes:
 J.T. Baker: 3024, 3028
 Mallinckrodt: 6834

2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Potassium Chlorate	3811-04-9	90 - 100%	Yes

3. Hazards Identification

Emergency Overview

DANGER! STRONG OXIDIZER. CONTACT WITH OTHER MATERIAL MAY CAUSE FIRE. HARMFUL IF SWALLOWED. EXPOSURE MAY CAUSE METHEMOGLOBINEMIA, LIVER OR KIDNEY DAMAGE. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT.

J.T. Baker SAF-T-DATA^(tm) Ratings (Provided here for your convenience)

Health Rating: 1 - Slight

Flammability Rating: 0 - None

Reactivity Rating: 3 - Severe (Oxidizer)

Contact Rating: 2 - Moderate

Lab Protective Equip: GOGGLES; LAB COAT; VENT HOOD; PROPER GLOVES

Storage Color Code: Yellow (Reactive)

Potential Health Effects

Inhalation:

Causes irritation to the respiratory tract. Symptoms may include coughing, shortness of breath.

Ingestion:

Causes irritation to the gastrointestinal tract. Symptoms may include nausea, vomiting and diarrhea. May cause abdominal pain, hemolysis, methemoglobinemia, cyanosis, anuria, coma, and convulsions. May cause liver and kidney damage. Death may occur from renal failure, generally in 4 days. Estimated lethal dose from 15 to 30 grams.

Skin Contact:

Causes irritation to skin. Symptoms include redness, itching, and pain.

Eye Contact:

Causes irritation, redness, and pain.

Chronic Exposure:

Repeated ingestion of small amounts may cause loss of appetite and weight loss.

Aggravation of Pre-existing Conditions:

No information found.

4. First Aid Measures

Inhalation:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion:

Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.

Skin Contact:

Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eye Contact:

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

5. Fire Fighting Measures

Fire:

Not combustible, but substance is a strong oxidizer and its heat of reaction with reducing agents or combustibles may cause ignition. When heated, it releases oxygen which increases combustion.

Explosion:

Contact with oxidizable substances may cause extremely violent combustion. Explodes with sulfuric acid. Inflames with explosion if triturated with any organic substances, sulfur, phosphorus, sulfite, hypophosphite and other oxidizable substances. Sealed containers may rupture when heated. Sensitive to mechanical impact.

Fire Extinguishing Media:

Use any means suitable for extinguishing surrounding fire. Water spray may be used to keep fire exposed containers cool.

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.

6. Accidental Release Measures

Remove all sources of ignition. Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Clean up spills in a manner that does not disperse dust into the air. Use non-sparking tools and equipment. Reduce airborne dust and prevent scattering by moistening with water. Pick up spill for recovery or disposal and place in a closed container.

7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage and moisture. Isolate from any source of heat or ignition. Avoid storage on wood floors. Separate from incompatibles, combustibles, organic or other readily oxidizable materials. 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 impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Eye Protection:

Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Appearance:

White crystals or powder.

Odor:

Odorless.

Solubility:

7g/100g water @ 20C (68F).

Specific Gravity:

2.3

pH:

No information found.

% Volatiles by volume @ 21C (70F):

0

Boiling Point:

400C (752F)

Melting Point:

368C (694F)

Vapor Density (Air=1):

4.2

Vapor Pressure (mm Hg):

No information found.

Evaporation Rate (BuAc=1):

No information found.

14. Transport Information

Domestic (Land, D.O.T.)

Proper Shipping Name: POTASSIUM CHLORATE
Hazard Class: 5.1
UN/NA: UN1485
Packing Group: II
Information reported for product/size: 220LB

International (Water, I.M.O.)

Proper Shipping Name: POTASSIUM CHLORATE
Hazard Class: 5.1
UN/NA: UN1485
Packing Group: II
Information reported for product/size: 220LB

15. Regulatory Information

-----\Chemical Inventory Status - Part 1\-----				
Ingredient	TSCA	EC	Japan	Australia
Potassium Chlorate (3811-04-9)	Yes	Yes	Yes	Yes

-----\Chemical Inventory Status - Part 2\-----				
Ingredient	Korea	--Canada-- DSL	NDSL	Phil.
Potassium Chlorate (3811-04-9)	Yes	Yes	No	Yes

-----\Federal, State & International Regulations - Part 1\-----			
Ingredient	-SARA 302- RQ	TPQ	-SARA 313- List Chemical Catg.
Potassium Chlorate (3811-04-9)	No	No	No

-----\Federal, State & International Regulations - Part 2\-----			
Ingredient	CERCLA	-RCRA- 261.33	-TSCA- 8(d)
Potassium Chlorate (3811-04-9)	No	No	No

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

**BAKER, INC. WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING
FROM USE OF OR RELIANCE UPON THIS INFORMATION.**

Prepared by: Environmental Health & Safety
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