



**UNIVAR®**

POTASSIUM CARBONATE

Univar USA Inc Material Safety Data Sheet

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Univar USA Inc., 17425 NE Union Hill Rd., Redmond WA 98052  
(425) 889 3400

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Emergency Assistance

For emergency assistance involving chemicals call  
Chemtrec - (800) 424-9300

PRODUCT NAME: POTASSIUM CARBONATE

MSDS NUMBER: 68608

DATE ISSUED: 08/16/2006

SUPERSEDES: 06/06/2003

ISSUED BY: 005241

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MATERIAL SAFETY DATA SHEET

1. Chemical Product And Company Information

Chemical Name: POTASSIUM CARBONATE  
Synonyms/Trade Names: Carbonic Acid, Dipotassium Salt; Potassium Carbonate,  
Dense Granular, Glass Grades  
Chemical Family: Inorganic potassium compound, inorganic carbonate  
Formula: K<sub>2</sub>CO<sub>3</sub>  
Molecular Weight: 138.21  
CAS No.: 584-08-7  
Uses:

Transportation Emergency Telephone Numbers:  
Not Regulated

Emergency Information:  
Call toll-free 24 hours a day:  
866-855-6947

Manufacturer & Supplier:  
ERCO Worldwide, a division of Superior Plus Inc.  
302 The East Mall, Ste. 200  
Toronto, Ontario Canada M9B 6C7  
(416) 239-7111

ERCO Worldwide (USA) Inc.  
101 Highway 73 South  
Nekoosa, Wisconsin 54457  
(715) 887-4000

Canadian WHMIS Classification(s):  
D2E - Other Toxic Effects E - Corrosive

## 2. Composition / Information On Ingredients

| Name:               | Conc. % By Weight | CAS No.  |
|---------------------|-------------------|----------|
| Potassium Carbonate | 100               | 584-08-7 |

## 3. Hazard Identification

### Emergency Overview:

White, free flowing, hygroscopic, odorless granules.

**WARNING!** Causes skin, eye, respiratory and digestive tract irritation. Harmful if swallowed.

### Routes of Entry:

Inhalation, Skin Contact, Eye Contact, Ingestion

### Symptoms of Exposure:

#### Inhalation:

Irritation of the nose and throat with sneezing and coughing may occur, based on pH.

#### Skin Contact:

Dust and concentrated solutions may be mild to moderate skin irritants, based on alkalinity. Sodium carbonate, a closely related chemical is a mild skin irritant.

#### Eye Contact:

The dust and concentrated solutions are probably moderate to severe eye irritants, based on alkalinity and comparison to sodium carbonate, which is a severe eye irritant. The dust will also cause irritation as a "foreign substance". Some tearing, blinking and mild, temporary pain may occur as the solid material is rinsed from the eye by tears. There is no human information available.

#### Ingestion:

Potassium carbonate is low in oral toxicity, based on animal information. Ingestion of very large amounts may cause stomach cramps, vomiting, and diarrhea. There is no human information available. Ingestion is not a typical route of occupational exposure.

### MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Preexisting disorders of the following organs or systems which may be aggravated by exposure to this material (or a component) include: skin, respiratory system (including asthma and other breathing disorders), gastrointestinal system.

## 4. First Aid Measures

### Skin:

Brush off excess chemical. Wash exposed skin well with plenty of soap and water. Remove contaminated clothing and shoes. Wash clothing and shoes...

clean shoes before reuse. If symptoms develop, get medical attention.

**Eyes:**

Hold the eyelids apart and flush the eye gently with a large amount of water for at least 20 minutes. Get medical attention.

**Inhalation:**

If symptoms develop, remove individual to fresh air and get medical attention immediately. If breathing is difficult, give oxygen. If breathing stops, give artificial respiration.

**Ingestion:**

Have person drink a glass of water immediately if able to swallow. Get immediate medical attention. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

**NOTES TO PHYSICIAN**

Never attempt to neutralize potassium carbonate with chemicals. Development of pulmonary edema may be delayed 48-72 hours. See Section 11 for Toxicological Information.

**5. Fire-Fighting Measures**

**Conditions Of Flammability:**

Material will not burn. Firefighters should wear self-contained, positive-pressure breathing apparatus and avoid skin contact.

**Means To Extinguish:**

Not Applicable - Choose extinguishing media suitable for surrounding materials.

**Hazardous Combustion Products:**

Flash Point & Method: Not applicable (TCC)  
Upper Flammability Limit: Not applicable  
Lower Flammability Limit: Not applicable  
Auto-Ignition Temperature: Not applicable  
Mechanical Impact Sensitivity: Not applicable  
Static Discharge Sensitivity: Not applicable

**6. Accidental Release Measures**

**Leak Or Spill Procedures:**

Confine spill. Shovel into closed containers. Flush spill area with water. Dispose of wash water in accordance with applicable Federal, state, and local regulations.

For all transportation accidents, call CHEMTREC at 800-424-9300.

**Waste Control Procedures:**

Consult appropriate Federal, State/Provincial and local regulations

authorities to ascertain disposal procedures.

## 7. Handling Storage

### Handling Procedures And Equipment:

Avoid contact with eyes, skin and clothing. Do not taste or swallow. Avoid breathing dust. Use only with adequate ventilation. Do not eat, drink, or smoke in the work area. Wash thoroughly after handling. Any protective clothing or shoes which become contaminated with potassium carbonate should be removed and thoroughly laundered and cleaned before wearing again. Discard any footwear that has been contaminated on the inner surface.

Carefully monitor handling, use and storage to avoid spills and leaks. Follow protective controls set forth in Section 8 when handling this product.

Water must always be readily accessible whenever potassium carbonate is loaded, unloaded, stored or used.

### Storage:

Store in labeled, sealed containers in a cool, dry, well-ventilated area. Keep containers closed and dry. Do not remove or deface label. Material is hygroscopic and will absorb moisture if exposed to humidity.

### INCOMPATIBLE MATERIALS FOR STORAGE OR TRANSPORT

Avoid contact with lime (CaO). This product will react with lime in the presence of water to produce corrosive caustic potash (KOH)

## 8. Exposures Controls / Personal Protection

### Protective Equipment:

#### EYE AND FACE PROTECTION

Wear chemical goggles. A face shield should be worn in addition to goggles where splashing or spraying is possible.

#### SKIN PROTECTION

Wear chemical resistant clothing, boots, and gloves, which are made of neoprene, PVC, or rubber. Always place pants legs over boots.

#### RESPIRATORY PROTECTION

Where airborne potassium carbonate dust may be present, a NIOSH/MSHA approved high-efficiency particulate filter with full face piece or self-contained breathing apparatus should be used. Follow any applicable respirator use standards and regulations.

### Engineering Controls:

#### VENTILATION

Local exhaust ventilation should be used where airborne potassium carbonate dust may be present. Otherwise, use general exhaust ventilation.

### GENERAL

Safety shower and eyewash station must be provided in the immediate work area. Portable or temporary systems should be provided for remote areas. Protective equipment and clothing should be selected, used, and maintained according to applicable standards and regulations. For further information, contact the clothing or equipment manufacturer.

#### 9. Physical And Chemical Properties

State: Solid  
Odor: Odorless  
Odor Threshold: Not applicable  
Boiling Point: Decomposes  
Melting Point: 891 C  
Freezing Point: not applicable  
pH: 11.6 @ 25 C (3% Solution)  
Coefficient Of Water/Oil Distribution: No data  
Appearance: White, hygroscopic, granules  
Specific Gravity: 2.428 @ 19 C  
Vapor Pressure: Not applicable  
Vapor Density: Not applicable  
Evaporation Rate: Not applicable  
Solubility In Water: 100%  
Bulk Density: 81-83 lb/ft<sup>3</sup> or 1,300 - 1,330 kg/m<sup>3</sup>

#### 10. Stability And Reactivity

##### Chemical Stability:

Stable

##### Reactivity Conditions:

Avoid contact with lime (CaO). Potassium carbonate and lime will react in the presence of water to form caustic potash.

##### Incompatible Substances:

Chlorine trifluoride; Magnesium; Acids.

##### Hazardous Decomposition Products:

Potassium oxide (K<sub>2</sub>O)

#### 11. Toxicological Information

##### Skin Contact:

Causes severe skin irritation with redness, an itching or burning feeling, and/or swelling of the skin. May cause skin damage.

##### Skin Absorption:

No information available

##### Eye Contact:

Causes severe eye irritation with tearing, redness, or a stinging or burning feeling. May cause swelling of the eyes with blurred vision. Can injure eye tissue. Effects may become more serious with repeated or prolonged

contact.

Inhalation:

This material can produce dust during processing. Breathing high concentrations may be harmful. Breathing this material causes irritation of the throat and lungs with cough and difficult breathing.

Ingestion:

Swallowing this material may be harmful or cause death. Harmful effects include burns and permanent damage to the digestive tract, including the mouth, throat, stomach and intestines. Symptoms may include severe abdominal pain and vomiting of blood. Blood loss through damaged tissue may lead to low blood pressure and shock.

LD50:

1870 mg/kg (rat)

LC50:

2570 mg/ kg (mouse)

Exposure Limits:

No occupational exposure levels have been established for potassium carbonate. However, the Occupational Safety and Health Administration (OSHA) has established a PEL-TWA of 15 mg/m<sup>3</sup>, total particulate, and 5 mg/m<sup>3</sup>, respirable particulate, for Particulates Not Otherwise Classified (PNOCs.)

Irritancy:

See Skin / Eye Contact

Sensitization:

No information available

Carcinogenicity:

This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP, or EPA.

Teratogenicity & Mutagenicity: No information available

Reproductive Toxicology:

Based on available data, it is not known whether exposure of the mother to this material can cause harm to the fetus.

Toxicological Synergism:

No information available

## 12. Ecological Information

Ecological Information:

No data available

Biodegradability:

Not biodegradable

Aquatic Toxicity:

No data available

## 13. Disposal Considerations

Disposal Considerations:

If this product becomes a waste, it may meet the criteria of a hazardous waste as defined under 40 CFR 261. Concentrated solutions of potassium carbonate having a pH of 12.5 or greater would have the following res

hazardous waste designation: D002. (40 CFR 261.22)

#### 14. Transportation Information

| Shipping Name (TDGR) | UN Number | Hazard Class | Packing Group |
|----------------------|-----------|--------------|---------------|
| Not Regulated        | N/A       | N/A          | N/A           |
| (TDGR/DOT)           | N/A       | N/A          | N/A           |

#### 15. Regulatory Information

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

##### Safety:

CANADIAN WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)  
CLASSIFICATION

WHMIS Classification applicable to this product:

D-2B (Toxic Material) based on skin and eye irritation effects.

E-Corrosive material

##### U.S. Regulatory Rules

Ingredients Potassium Carbonate

CERCLA/SARA Section 302: Not listed

SARA (311, 312) Hazard Class: not listed

CERCLA/SARA Section 313: not listed

OSHA: Not a Hazardous Substance under 29 CFR Section 1910, Subpart Z.

California Proposition 65: Not Listed.

MA Right to Know List: Not Listed.

New Jersey Right-to-Know List: Not Listed.

Pennsylvania Right to Know List: Not Listed.

##### Environmental:

US Federal Regulations Reportable Quantity (RQ) is not applicable

The components of this product are listed on the Toxic Substances Control Act (TSCA) inventory

Superfund Amendments and Reauthorization Act (SARA) Title III Hazard Category  
- Immediate Health

This substance is listed in the Canadian Domestic Substances List (DSL)

##### Transportation:

Refer to Section 14.

#### 16. Other Information

Information on this form is furnished in compliance with the Regulations Respecting Controlled Products under the Hazardous Products Act and is not to be used for any other purpose, nor is it to be reproduced or published.

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Each recipient should carefully review the information, data and recommendations in the specific context of the intended use.

## Univar USA Inc Material Safety Data Sheet

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For Additional information contact MSDS Coordinator during business hours, Pacific time: (425) 889-3400

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