

Material Safety Data Sheet

Section 1: Chemical Product

Product Name: Potassium carbonate

Catalog Codes: 11235, 21235

CAS#: 584-08-7

RTECS: TS7750000

TSCA: TSCA 8(b) inventory: Potassium carbonate,

anhydrous

CI#: Not available.

Synonym: Salt of Tartar

Chemical Name: Potassium Carbonate

Chemical Formula: K₂CO₃

Section 2: Composition and Information on Ingredients

Composition:

| Name | CAS # | % by Weight |
|---------------------|----------|-------------|
| Potassium carbonate | 584-08-7 | 100 |

Toxicological Data on Ingredients: Potassium carbonate: ORAL (LD50): Acute: 1870 mg/kg [Rat].

Section 3: Hazards Identification

Potential Acute Health Effects:

Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of eye contact (corrosive).

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance is toxic to mucous membranes. The substance may be toxic to skin, eyes. Repeated or prolonged exposure to the substance can produce target organs damage.

Section 4: First Aid Measures

Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.

Skin Contact:

In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Serious Skin Contact:

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation:

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

Serious Inhalation: Not available.

Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: Non-flammable.

Auto-Ignition Temperature: Not applicable.

Flash Points: Not applicable.

Flammable Limits: Not applicable.

Products of Combustion: Not available.

Fire Hazards in Presence of Various Substances: Not applicable.

Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions: Not applicable.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

Section 6: Accidental Release Measures

Small Spill:

Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill:

Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Section 7: Handling and Storage

Precautions:

Keep container dry. Do not ingest. Do not breathe dust. Never add water to this product. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, metals, acids.

Storage:

Hygroscopic. Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 25°C (77°F).

Section 8: Exposure Controls/Personal Protection

Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection:

Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not available.

Section 9: Physical and Chemical Properties

Physical state and appearance: Solid. (Powdered solid. Deliquescent solid.)

Odor: Odorless.

Taste: Not available.

Molecular Weight: 138.21 g/mole

Color: White.

pH (1% soln/water): Not available.

Boiling Point: Decomposes.

Melting Point: 891°C (1635.8°F)

Critical Temperature: Not available.

Specific Gravity: 2.29 (Water = 1)

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: See solubility in water.

Solubility: Soluble in cold water.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Dust generation, moist air, water, incompatible materials

Incompatibility with various substances:

Reactive with oxidizing agents, metals, acids. Slightly reactive to reactive with moisture.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity:

Hygroscopic. Reacts with water to evolve heat. Incompatible with KCO, chlorine trifluoride, calcium oxide, and

magnesium. **Special Remarks on Corrosivity:** Not available.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Eye contact. Inhalation. Ingestion.

Toxicity to Animals: Acute oral toxicity (LD50): 1870 mg/kg [Rat].

Chronic Effects on Humans:

Causes damage to the following organs: mucous membranes. May cause damage to the following organs: skin, eyes.

Other Toxic Effects on Humans:

Hazardous in case of skin contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of eye contact

(corrosive). **Special Remarks on Toxicity to Animals:** Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans:

Acute Potential Health Effects: Skin: Causes severe skin irritation. Eyes: It is severely irritating to the eyes and its mucous membranes. It may cause corneal injury. It may cause burns and loss of vision. It may cause permanent damage. The amount of tissue damage depends on the length of contact. Ingestion: It causes gastrointestinal irritation with nausea, vomiting, abdominal pain, swollen glottis, increased respiration, and possible burns to the lips, tongue, oral mucosa, hypopharynx, stomach, or esophagus. It may affect the cardiovascular system(circulatory collapse), urinary system, and metabolism. Inhalation: Causes respiratory tract and mucous membrane irritation. Exposure can cause coughing, chest pains, and difficulty breathing (dyspnea).

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise. **Toxicity of the Products of Biodegradation:** The products of degradation are less toxic than the product

itself. **Special Remarks on the Products of Biodegradation:** Not available.

Section 13: Disposal Considerations

Waste Disposal:

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

Section 14: Transport Information

DOT Classification: Not a DOT controlled material (United States).

Identification: Not applicable.

Special Provisions for Transport: Not applicable.

Section 15: Other Regulatory Information

Federal and State Regulations: TSCA 8(b) inventory: Potassium carbonate, anhydrous

Other Regulations:

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications:

WHMIS (Canada):

CLASS D-2B: Material causing other toxic effects (TOXIC). CLASS E: Corrosive solid.

DSCL (EEC):

R22- Harmful if swallowed. R37/38- Irritating to respiratory system and skin. R41- Risk of serious damage to eyes. S2- Keep out of the reach of children. S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S37/39- Wear suitable gloves and eye/face protection. S46- If swallowed, seek medical advice immediately and show this container or label.

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 0

Reactivity: 1

Personal Protection: E

National Fire Protection Association (U.S.A.):

Health: 2

Flammability: 0

Reactivity: 0

Specific hazard:

Protective Equipment:

Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.