

## Potassium Carbonate Liquid

Kidde-Fenwal, Inc.  
400 Main Street  
Ashland MA 01721

Date: July 1997  
Emergency Phone No.  
CHEMETREC:  
(800) 424-9300

### Material Safety Data Sheet For Potassium Carbonate Liquid

---

#### Section I

#### Material Identification

---

Chemical Name: Potassium Carbonate Liquid

C.A.S.#: 584-08-7

Synonyms: Potassium Carbonate In Solution, Aqueous Potassium Carbonate, APC  
Also: Pearl Ash, Potash-Hydrated

D.O.T. Identification No. : None

D.O.T. Hazard Guide: None

Trade Name: Carbonate of Potash

Chemical Formula:  $K_2CO_3$

D.O.T. Shipping Name: Potassium Carbonate Liquid

N.F.P.A. Registry: N/A

Chemical Family: Alkali

Labeling: N/A

H.M.I.S.: 2-0-0

R.Q.: None Required

Placard: None

---

#### Section II (See Section XI)

#### Ingredients & Hazards

---

Principal component:  $K_2CO_3$

C.A.S No.: 584-08-7

Percent: Greater than 40 wt.% in water solution

Hazardous mixtures of other liquids, solids or gases or gases: this material reacts violently with acids and liberates suffocating quantities of carbon dioxide.

---

#### Section III

#### Physical Data

---

Boiling Point: 228 °F ( 108.9 °C)

Spec. Gravity: 1.440

Freeze / Solidification Temp: -20 °F (-28.9 °C)

pH: Approximately 11.8

Vapor Pressure: Slightly Less Than Pure Water

Molecular Weight: 138.2

Vapor Density: N/A

Appearance/Odor: Water White, No Odor

Percent Volatile By Volume: 57.8%

Evaporation Rate: Slightly Less Than Pure Water

Solubility In Water: Complete

---

---

---

Section IV

Fire & Explosion Data

---

Flash Point (method): Non-combustible.

Extinguishing Media: Suitable for surrounding fire.

Auto Ignition Temperature: Not combustible.

Special Fire Fighting Procedures: If carbon dioxide is released, use an approved self-contained breathing apparatus.

Unusual Fire/Explosion Hazards: High temperatures due to fire or mixing with acids can cause this material to decompose releasing carbon dioxide gas.

Additional Information: If there is evidence of product decomposition, atmospheric tests should be run for carbon dioxide and oxygen content. Excessive quantities of carbon dioxide can cause suffocation of personnel in the immediate area.

---

Section V

Health Hazard Data

---

Threshold Limit Value: None

OSHA Limit Value: None Listed

NTP Carcinogen: Not Listed

Mutagenic: Not Listed

Reproductive Toxicity: None Listed

Medical Conditions Aggravated By Exposure: None

Primary Routes Of Exposure: Body Contact

Effects Of Exposure:

- |             |   |
|-------------|---|
| Inhalation: | - Cannot be inhaled.  |
| Skin        | - Causes mild irritation.                                   |
| Eyes        | - May cause injury.   |
| Ingestion   | - Causes irritation to the digestive and respiratory tract. |

Emergency First Aid:

- |            |  |
|------------|--|
| Inhalation | - Cannot be inhaled.   |
| Skin       | - Wash with water.   |
| Eyes       | - Flush with water for 15 minutes including .<br>under the eyelids.                    |
| Ingestion  | - Drink plenty of water or fruit juice, obtain services of a physician<br>immediately. |
- 

Section VI

Reactivity Data

---

Stability: Stable under normal conditions

Conditions to avoid: Excessive heat or contact with acids

Incompatibility (materials to avoid): Acids and excessive heat

Hazardous decomposition products: Carbon dioxide is generated when reacted with acids. Large quantities of CO<sub>2</sub> in an enclosed area will result in lack of oxygen and may cause suffocation of personnel.

Polymerization: Will not polymerize

---

Section VII

Environmental Protection Procedures

---

Spill Response: Stop leaks. Spills, after containment, should be shoveled up or removed by vacuum truck (if liquid) to chemical waste area. Flush area with large amounts of water and dispose of wash water according to federal, state, and local regulation.

Waste Disposal: The materials resulting from cleanup operations may be hazardous wastes and, therefore, subject to specific regulations. Package, store, transport, and dispose of all cleanup materials and any contaminated equipment in accordance with all applicable federal, state, and local health and environmental regulations. Shipments of waste material may be subject to manifesting requirements per applicable regulations. Appropriate disposal will depend on the nature of each waste material and should be performed by competent and properly permitted contractors. Insure that all responsible federal, state, and local agencies receive proper notification of disposal.

---

Section VIII

Special Protection Information

---

Eye Protection: Goggles  
Respiratory Protection: Not Required  
Ventilation Recommended: Not Required  
Glove Type Recommended: Rubber Or Plastic

---

Section IX

Special Precautions

---

Hygienic practices in handling/storing: No unusual requirements since solution is non-hazardous  
Precautions to be taken for handling/storing: Keep storage area separate from acids  
Precautions for repair, maintenance of contaminated equipment: Drain and rinse with water

---

Section X

Transportation

---

Usual shipping containers: Tank cars and trucks, drums  
Usual shelf life: Unlimited  
Storage/transport temps: Ambient  
Suitable storage materials/coatings: Coated steel-plastic

---

Section XI

Regulatory Information

---

Toxic Substances Control Act: This substance is listed on the Toxic Substances Control Act Chemical Substance Inventory 1985 Edition, Vol. 1.  
Emergency Planning and Community Right to Know, per 40 CFR 355, Appendix A  
Threshold Planning Quantity: None established  
This product or mixture contains a toxic chemical or chemicals not subject to the reporting requirements of section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 - see Section II.  
Comprehensive Response, Compensation and Liability Act (CERCLA): This product is not subject to CERCLA reporting requirements.

---

Kidde-Fenwal, Inc.'s information is drawn from recognized sources believed to be reliable. Kidde-Fenwal, Inc. makes no guarantees nor assumes any liability in connection with this information.