



Effective Date: 01/14/14

Replaces Revision:

NON-EMERGENCY TELEPHONE
610-866-4225

24-HOUR CHEMTREC EMERGENCY TELEPHONE
800-424-9300

SDS – SAFETY DATA SHEET

1. Identification

Product Identifier: POTASSIUM CARBONATE SOLUTION

Synonyms: Pearl Ash, Potash, Carbonic Acid, Dipotassium Salt, Salt of Tartar

Chemical Formula: K₂CO₃

Recommended Use of the Chemical and Restrictions On Use: Laboratory Reagent

Manufacturer / Supplier: Puritan Products; 2290 Avenue A, Bethlehem, PA 18017 **Phone:** 610-866-4225

Emergency Phone Number: 24-Hour Chemtrec Emergency Telephone 800-424-9300

2. Hazard(s) Identification

Classification of the Substance or Mixture:

Acute toxicity, Oral (Category 4)

Skin irritation (Category 2)

Eye irritation (Category 2A)

Specific target organ toxicity - single exposure (Category 3)

Risk Phrases:

Symbol: Xi

R22: Harmful if swallowed.

R36/R38: Irritating to eyes and skin.

Label Elements:

Trade Name: POTASSIUM CARBONATE

Signal Word: Warning



Hazard Statements:

H302: Harmful if swallowed.

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

Precautionary Statements:

P260: Do not breathe dust/ fume/ gas/ mist/ vapors / spray.

P264: Wash hands thoroughly after handling.

P280: Wear protective gloves / protective clothing / eye protection/ face protection.

P284: Wear respiratory protection.

P301 + P312: IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.

P302 + P352: IF ON SKIN: Wash with plenty of soap and water.

P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312: Call a POISON CENTER or doctor / physician if you feel unwell.

P332 + P313: If skin irritation occurs: Get medical advice / attention.

P337 + P313: If eye irritation persists: Get medical advice / attention.

3. Composition / Information on Ingredients

CAS Number: 584-08-7

EC Number: 209-529-3

Molecular Weight: 138.21 g/mol

Ingredient	CAS Number	EC Number	Percent	Hazardous	Chemical Characterization
Potassium Carbonate	584-08-7	209-529-3	0 - 50%	Yes	Substance
Water	7732-18-5	231-791-2	Balance	No	Mixture

4. First-aid Measures

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

Ingestion: If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. Get medical attention immediately.

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 gentle but large stream of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Remove contact lenses, if present and easy to do. Get medical attention immediately.

5. Fire-fighting Measures

Fire: Not considered to be a fire hazard.

Explosion: Not considered to be an explosion hazard. An explosion occurred after mixing Sodium Hydrosulfite, Aluminum Powder, Potassium Carbonate and Benzaldehyde.

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 face piece operated in the pressure demand or other positive pressure mode.

6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures: Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Avoid breathing dust.

Environmental Precautions and Methods and Materials for Containment and Cleaning Up: Contain and recover liquid when possible. Do not let product enter drains. Residues from spills can be diluted with water, neutralized with dilute acid such as acetic, hydrochloric or sulfuric. Absorb neutralized caustic residue on clay, vermiculite or other inert substance and package in a suitable container for disposal. Do not flush to sewer! US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.

7. Handling and Storage

Precautions for Safe Handling and Conditions for Safe Storage, Including Any Incompatibilities: Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from incompatible substances. Containers of this material may be hazardous when empty since they retain product residues (dust, solids, vapors, liquid) Observe all warnings and precautions listed for the product.

8. Exposure Controls / Personal Protection

Airborne Exposure Limits:

OSHA Permissible Exposure Limit (PEL): None listed

ACGIH Threshold Limit Value (TLV): None listed

Ventilation System: A system of local and / or general exhaust is recommended to keep employee exposures low. 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, glycerin, 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. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Appearance: Clear, colorless solution

Odor: Odorless

Odor Threshold: No information found

pH: 11.6 Aqueous solution

% Volatiles by volume @ 21C (70F): 0

Melting Point: 891C (1636F)

Boiling Point / Boiling Range: Decomposes

Flash Point: No data available

Evaporation Rate (BuAc=1): No information found

Flammability: Not considered to be a fire hazard

Upper / Lower Flammability or Explosive Limits: Not applicable

Vapor Pressure (mm Hg): No information found

Vapor Density (Air=1): No information found

Relative Density (10wt% solution): 1.09 g/cm³

Solubility: 138 g/l at 20C (68 F) - completely soluble

Partition Coefficient: n-octanol / water: No data available

Auto-ignition Temperature: Not applicable

Decomposition Temperature: No data available

Viscosity: No data available

Stability and Reactivity

Reactivity and / or Chemical Stability: Stable under ordinary conditions of use and storage.

Possibility of Hazardous Reactions and Conditions to Avoid: Moisture, heat, dusting and incompatibles.

Incompatible Materials: Acids, Chlorine Trifluoride, Magnesium. An explosion occurred after mixing Sodium Hydrosulfite, Aluminum Powder, Potassium Carbonate and Benzaldehyde.

Hazardous Decomposition Products: Contact with acids and involvement in a fire can cause formation of Carbon Dioxide. Thermal decomposition may also form Potassium Oxide.

10. Toxicological Information

Emergency Overview: WARNING! CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. MAY BE HARMFUL IF SWALLOWED.

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 have moderate toxic effects if consumed in large enough quantities. Ingestion of large amounts may be corrosive to mouth, throat and GI tract and produce abdominal pains, vomiting, diarrhea, and circulatory collapse.

Skin Contact: Contact with dry material causes irritation. In aqueous solution it is a strong caustic and as such may have corrosive effects on the skin.

Eye Contact: Causes extreme irritation, redness, pain and possibly corneal damage.

Chronic Exposure: A chronic dermatitis may follow repeated contact with this substance.

Aggravation of Pre-existing Conditions: No information found.

Specific Target Organ Toxicity - Single Exposure (Globally Harmonized System:) Inhalation - May cause respiratory irritation.

Specific Target Organ Toxicity - Repeated Exposure (Globally Harmonized System:) No data available.

Numerical Measures of Toxicity: Cancer Lists: NTP Carcinogen

Ingredient	Known	Anticipated	IARC Category
Potassium Carbonate (584-08-7)	No	No	None
Water (7732-18-5)	No	No	None

Acute Toxicity:

Oral rat LD50: 1870 mg/kg

11. Ecological Information

Ecotoxicity: LC50 (fish): Pimephales promelas (fathead minnow) < 510 mg/l - 96 h

Persistence and Degradability: No data available

Bioaccumulative Potential: No data available

Mobility in Soil: No data available

Other adverse effects: No data available

12. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste 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.

13. Transport Information

Land Transport ADR/RID and GGVS/GGVE (Cross Border / Domestic)

Not regulated

Maritime Transport IMDG/GGVSea

Not regulated

Air Transport ICAO-TI and IATA-DGR

Not regulated

14. Regulatory Information

Chemical Inventory Status – Part 1

Ingredient	TSCA	EC	Japan	Australia
Potassium Carbonate (584-08-7)	Yes	Yes	Yes	Yes
Water (7732-18-5)	Yes	Yes	Yes	Yes

Chemical Inventory Status – Part 2

Ingredient	Korea	Canada		Phil.
		DSL	NDSL	
Potassium Carbonate (584-08-7)	Yes	Yes	No	Yes
Water (7732-18-5)	Yes	Yes	No	Yes

Federal, State & International Regulations - Part 1

Ingredient	SARA 302		SARA 313	
	RQ	TPQ	List Chemical	Catg.
Potassium Carbonate (584-08-7)	No	No	No	No
Water (7732-18-5)	No	No	No	No

Federal, State & International Regulations - Part 2

Ingredient	RCRA		TSCA
	CERCLA	261.33	8(d)
Potassium Carbonate (584-08-7)	No	No	No
Water (7732-18-5)	No	No	No

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

Australian Hazchem Code: Not classified

Poison Schedule: None allocated

15. Other Information

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