# SAFETY DATA SHEET

## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

# Potassium Carbonate, Anhydrous

Product Name: Potassium Carbonate Anhydrous, APC

Identified Uses: Manufacturing

Distributor:
Chemistry Connection
253 Sturgis Road
Conway, AR 72034
Phone: (501) 470-9689

24-hour Emergency Phone: CHEMTREC: (800) 424-9300

## SECTION 2: HAZARDS IDENTIFICATION

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Signal Word: Warning

Pictogram(s):

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| | **Hazard Statements** |
| H302 | Harmful if swallowed. |
| H319 | Causes serious eye irritation. |
| | **Precautionary Statements** |
| P264 | Wash skin thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P280 | Wear protective gloves/eye protection/face protection. |
| P301 + P312 | IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician if you feel unwell. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P330 | Rinse mouth. |
| P337 + P313 | If eye irritation persists: Get medical advice/attention. |
| P501 | Dispose of contents/container to an approved waste disposal plant. |

## SECTION 3: COMPOSITION/INFORMATION ONINGREDIENTS

Synonyms:

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| CHEMICAL NAME: | Potassium Carbonate |
| TRADE NAME: | APC, Carbonate of Potash |
| SYNONYMS: | PotCarb, Pearl Ash, Anhydrous Potassium Carbonate, APC |
| C.A.S: | 584-08-7 |
| WHMIS: | E |
| CHEMICAL FORMULA: | $K_2CO_3$ |
| CHEMICAL FAMILY: | Alkali |

## SECTION 4 FIRST AID MEASURES

Description of first aid measures:

It is a severe irritant of the eyes, skin, nose and throat. Ingestion of large amounts is corrosive, and may result in circulatory collapse and death. Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

Irritating to nose, throat and respiratory tract. May cause coughing, sneezing and difficulty breathing. If breathed in, move person into fresh air. If not breathing, give humidified air. Consult a physician.

In case of skin contact

Brush off any loose material. Wash off with soap and plenty of water for at least 15 minutes. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do. Consult a physician.

If swallowed

Do NOT induce vomiting. Give water as tolerated. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

## SECTION 5 FIRE FIGHTING MEASURES

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| Flash Point: | Non-combustible. |
| Extinguishing Media: | Suitable for surrounding fire. |
| Auto Ignition Temp: | Non-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 that product decomposition has occurred, 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 6 ACCIDENTAL RELEASE MEASURES

Environmental Precautions:
Avoid discharge into drains, water courses or onto the ground. Contact local authorities in case of spillage to drain/ aquatic environment.

Containment and Cleaning:
Reclaim and reuse as much as possible. Shovel up dry spills and place in sealable containers for recovery or disposal. Remainder of spill may normally be washed to the sewer providing environmental control limits are not affected. Avoid skin contact with wetted material.

## SECTION 7: HANDLING AND STORAGE

Precautions to be taken for handling and storage:
Wear appropriate protective equipment to prevent contact with skin and eyes. Control dust and mist generation. When diluting or preparing a solution, add to water in small amounts to avoid boiling and splattering. Label and close containers when not in use.

Storage Procedures:
Store in a cool, dry, well ventilated area in airtight containers. Material is hygroscopic and will absorb moisture and carbon dioxide from atmosphere. Area should have a caustic-resistant floor and approved drainage system. Store away from incompatible materials (potassium cyanate, boric acid). Reaction with acids may generate heat and carbon dioxide.

## SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Principal Component: Potassium Carbonate

Occupational Exposure Limits:
Regulatory Limits:

| Component | OSHA Final PEL TWA | OSHA Final PEL STEL | REL 8hr TWA |
|---|---|---|---|
| Inhalable Particulate | --- | --- | 2 $mg/m^3$ |

Exposure Controls:

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| Eye Protection: | Goggles where dust contact may be encountered. |
| Respiratory Protection: | A NIOSH-approved particulate respirator or dust filter mask should be worn if dust is present. |
| Other Protection: | Usually not required. |
| Ventilation Recommended: | Provide local exhaust ventilation where dust or mist may be generated. |

Skin and Body Protection: Wear protective clothing to minimize skin contact. When potential for contact with dry material exists, wear disposable coveralls suitable for dust exposure, such as Tyvek. Contaminated clothing should be removed and laundered before reuse.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties:

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| Appearance | White powder |
| Odor | No data available |
| Odor Threshold | No data available |
| pH | 11-13 at 138 g/l at 25 °C (77 °F) |
| Melting point | 899°C (1,650°F) |
| Initial boiling point | Non-combustible |
| Flash point | Non-combustible |
| Auto-ignition Temp | Non-combustible |
| Evaporation rate | No data available |
| Flammability (solid, gas) | Non-combustible |
| Upper/lower flammability or explosive limits | Non-combustible |
| Relative density (water = 1) | 2.428 at 19°C |
| Molecular Weight | 138.2 |
| Bulk Density | 75-83 $lbs/ft^3$ |
| Vapor Density | No data available |
| Vapor Pressure | No data available |
| Solubility in water | 112g (in 100ml water @ 20°C) |
| Viscosity | No data available |
| Decomposition Temperature | No data available |
| Partition Coefficient: n-octanol/water | No data available |

## SECTION 10: STABILITY AND REACTIVITY

Stability: Stable under normal conditions.

Conditions to avoid: Cross contamination with other chemicals. Do not allow dust to blow freely into the environment. Material exposed to conditions of high moisture, or water, will form high pH sludges or liquids.

Incompatibility: Magnesium, acids and excessive heat. Large quantities of $CO_2$ generated in an enclosed area will result in displacement of oxygen and may cause suffocation of personnel.

Hazardous decomposition products: Carbon dioxide is generated when reacted with acids or exposed to high temperatures. When heated to decomposition, may emit toxic $K_2O$ fumes.

Polymerization: Hazardous polymerization WILL NOT occur.

## SECTION 11: TOXICOGICAL INFORMATION

Information on likely routes of exposure:

Ingestion: Ingestion of this material may cause oral, esophageal, glottis redness, irritation, ulceration, edema, and stomach and intestinal irritation and burns. Ingesting large quantities may cause ulceration, vomiting, shock, and death.

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| Inhalation: | Inhalation of this material may cause upper airway irritation, cough, redness of mouth and upper airways.. |
| Skin contact: | Causes skin redness/irritation. |
| Eye contact: | Eye exposure may cause severe irritation and redness to the eye lids, conjunctiva. Untreated, prolonged eye contact can cause permanent and severe eye damage.. |

Information on toxicological effects:

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| Acute toxicity: | This material when applied to the skin of guinea pigs did not elicit any dermal sensitization reaction. |
| IDLH: | None |
| Germ cell mutagenicity: | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. |
| Carcinogenicity: | This product is not considered to be a carcinogen by IARC, ACGIH, NTP or OSHA. |
| Chronic effects: | No data available. |

Product Species Test Results:

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| Rat - Oral $LD_{50}$: | 1,870 mg/kg |
| Rabbit - Dermal $LD_{50}$: | >2,000 mg/kg |

## SECTION 12: ECOLOGICAL INFORMATION

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| Aquatic toxicity: | May increase pH of waterways and adversely affect aquatic life. |
| Fish toxicity: | $LC_{50}$ Bluegill sunfish: 230 mg/l, 96 hr<br>$LC_{50}$ Rainbow trout: 68 mg/l, 96 hr<br>$LC_{50}$ Fathead minnow: 940 mg/l,246 hr<br>$LC_{50}$ Ceriodaphnia dubla (water flea): 630 mg/l, 24 hr<br>$LC_{50}$ Ceriodaphnia dubla (water flea): 630 mg/l, 48 hr |
| Persistence and degradability: | This material is inorganic and not subject to biodegradation |
| Bioaccumulative potential: | This material is believed not to bioaccumulate. Potassium carbonate is very soluble in water. Therefore the substance does not accumulate in lipophilic tissues of living organisms. |
| Mobility in soil: | No data available. |

## SECTION 13: DISPOSAL CONSIDERATIONS

Reclaim and reuse as much as possible. Shovel up dry spills and place in sealable containers for recovery or disposal. Remainder of spill may normally be washed to the sewer providing environmental control limits are not affected. Avoid skin contact with wetted material. Dispose in accordance with all applicable regulations.

## SECTION 14: TRANSPORT INFORMATION

Shipping:

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| Usual Shipping Containers: | Pneumatic trucks or rail cars, drums, bags, supersacks. |
| Usual Shelf Life: | Indefinite if kept dry (life of containers). |
| Storage/Transport Temperatures: | Ambient. |

Suitable Storage:

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| Materials/Coatings: | Moisture proof containers - plastics, metal, cloth, paper. |
| Unsuitable: | Porous containers. |

D.O.T. Information:
Not regulated

Canadian Transportation of Dangerous Goods:
Not regulated

## SECTION 15 REGULATORY INFORMATION

SARA 302 Components
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components
Not regulated.

SARA 311/312 Hazards
EPCRA reporting quantities: TQ:10,000 pounds (100% $K_2CO_3$ basis).

Massachusetts Right To Know Components
No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components
Potassium Carbonate CAS#: 584-08-7

New Jersey Right To Know Components
Potassium Carbonate CAS#: 584-08-7

California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

OSHA PSM TPQ: Not listed.

Toxic Substances Control Act (TSCA):
CAS# 584-08-7 is listed on the TSCA inventory.

Comprehensive Environmental Response Compensation Liability Act: (CERCLA)
Not regulated.

## SECTION 16 OTHER INFORMATION

HMIS Rating:
Health hazard: 2
Chronic Health Hazard:
Flammability: 0
Physical Hazard: 0

NFPA Rating:
Health hazard: 2
Fire Hazard: 0
Reactivity Hazard: 0

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|---|---|
| Version 1.0 For the new GHS SDS Standard | Revision Date: 2/9/2015 |
| Version 1.1Graphics updated | Revision Date: 3/9/2015 |
| Version 1.2 Updates to Section 9 | Revision Date: 6/2/2015 |
| Version 1.3 Update to Sections 3,9 | Revision Date: 7/30/2015 |
| Version 1.4 Update to Sections 2,7,15 | Revision Date: 10/5/2015 |
| Version 1.5 Update to Sections 1 | Revision Date: 4/15/2016 |
| Removed Version , Updated Formatting | Revision Date: 5/16/2018 |