

SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Potassium Carbonate, Liquid 47%

Product Name: Potassium Carbonate, PotCarb, LPC

Identified Uses: Laboratory chemicals, Manufacturing

Company Information:

ASHTA Chemicals Inc.

P.O. Box 858

Ashtabula Ohio 44005

Phone: (440) 997-5221

Fax: (440) 998-0286

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

SECTION 2: HAZARDS IDENTIFICATION

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

GHS label elements, including precautionary statements:

Signal Word: **Danger**

Pictogram(s):



Hazard Statements

| | |
|------|-----------------------------------|
| H302 | Harmful if swallowed. |
| H315 | Causes skin irritation. |
| H318 | Causes serious eye damage. |
| H335 | May cause respiratory irritation. |

Precautionary Statements

| | |
|-------------|--|
| P261 | Avoid breathing dust/ fume / mist/ spray. |
| P264 | Wash skin thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection |
| P301 + P312 | IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. |
| P304 + P340 | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. |



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| 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. |
| P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P501 | Dispose of contents/container in accordance with local/state/national regulations. |

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms:

| | |
|-------------------|---|
| CHEMICAL NAME: | Potassium carbonate liquid |
| TRADE NAME: | PotCarb, Carbonate of potash, LPC |
| SYNONYMS: | Pear ash, potash-hydrated potassium carbonate in solution |
| CONCENTRATION: | 47-47.5% potassium carbonate, balance - water |
| 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:

Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If breathing is difficult, give oxygen (can only be given by a qualified person). Consult a physician.

In case of skin contact

Rinse with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Consult a physician if irritation persists.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Give a glass of water. Do not induce vomiting unless directed to do so. Consult a physician.

Most important symptoms, effects, acute and delayed:

Irritation

Indication of immediate medical attention and special treatment needed:

No data available.

SECTION 5 FIRE FIGHTING MEASURES

| | |
|-----------------------|--------------------------------|
| Flash Point (Method): | None. |
| 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: Contact with combustible materials may cause fire and explosion.

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. The product itself does not burn.

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:
Follow preplanned emergency procedures. Only properly equipped, trained, functional personnel should attempt to contain a leak. All other personnel should be evacuated from the danger area. Pick up and arrange disposal without creating dust. Sweep up and shovel to suitable, closed containers for disposal. Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

SECTION 7: HANDLING AND STORAGE

Precautions to be taken for handling and storage:
Keep storage area separate from acids. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

Precautions for repair:
Equipment: Only personnel trained and qualified in handling this product should prepare equipment for maintenance. Drain and rinse with water.

Other Precautions: Do not permit personnel to handle this material without proper training and all necessary safety equipment.

Hygienic Practices in handling and storage:
No unusual requirements.

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Principal Component: Potassium Carbonate, Water

Occupational Exposure Limits:

Regulatory Limits:

| Component | ACGIH TLV | 15 Minute STEL | NIOSH IDLH |
|-----------------------|-----------|----------------|------------|
| Inhalable Particulate | --- | --- | --- |

**Exposure Controls:**

Eye Protection: Goggles and face shield.
Respiratory Protection: Not required.
Other Protection: Protective clothing must be worn. Safety eye wash and shower station should be available in the handling area.
Ventilation Recommended: Not required.
Glove Type Recommended: Rubber or plastic.
Additional Information: Emergency eyewash and safety shower.

Appropriate engineering controls:

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Hazardous Mixtures of Other Liquids, Solids or Gases:

The substance decomposes in flame or on a hot surface, forming carbon dioxide which can then displace oxygen.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties:

| | |
|--|-------------------------------|
| Appearance | Colorless liquid |
| Odor | No odor |
| Odor Threshold | N/A |
| pH | 13.5-14 |
| Melting point/freezing point | -12°C (10°F) |
| Initial boiling point | 112 °C (234 °F) |
| Flash point | Not flammable |
| Auto-ignition Temp | Not flammable |
| Evaporation rate | Slightly less than pure water |
| Flammability (solid, gas) | Not flammable |
| Upper/lower flammability or explosive limits | Not flammable |
| Water solubility | 100% |
| Molecular Weight | 138.21 |
| Relative Density | 1.496 @ 60°F |
| Vapor Density (air =1) | No data available |
| Vapor Pressure | Slightly less than pure water |
| Partition Coefficient: n-octanol/water | No data available |
| Decomposition Temperature | No data available |
| Bulk Density | No data available |

SECTION 10: STABILITY AND REACTIVITY

Stability: Potassium carbonate is stable under normal conditions.
Conditions to avoid: Excessive heat or contact with acids.
Incompatibility: Acids, alkaline metals and excessive heat.



Hazardous decomposition products: Carbon dioxide is generated when reacted with acids. Large quantities of CO₂ in an enclosed area will result in lack of oxygen and may cause suffocation of personnel.

Polymerization: Hazardous polymerization WILL NOT occur.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Ingestion: Large doses may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Inhalation: Not expected to be hazardous by inhalation.
Skin contact: Irritating to skin.
Eye contact: May cause irritation with tearing, swelling or stinging of the eyes.

Symptoms related to the physical, chemical and toxicological characteristics:

Contact with this material may cause dermatitis to the skin.

Germ cell mutagenicity: No data available.
Carcinogenicity: This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
Aspiration hazard: Due to the physical form of the product it is likely not an aspiration hazard.
Chronic effects: Prolonged exposure may cause irritation, redness.
Product Species Test Results:
Rat - Oral LC₅₀: 1870 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY DATA:

Aquatic Toxicity: Rainbow trout LC₅₀ = 68 mg/L 96 hours; Bluegill sunfish LC₅₀ = 230 mg/L 96 hours

Invertebrate Toxicity: Daphnia magna EC₅₀ (hard water) = 430 mg/L 48 hours; Daphnia pulex EC₅₀ (soft water) = 200 mg/L 48 hours

BIODEGRADATION: This material is inorganic and not subject to biodegradation.
PERSISTENCE: This material is believed not to persist in the environment.
BIOCONCENTRATION: This material is not expected to bioconcentrate in organisms.
ADDITIONAL
ECOLOGICAL
INFORMATION: May increase pH of waterways and adversely affect aquatic life.

SECTION 13: DISPOSAL CONSIDERATIONS

Dilute with water, neutralize with a dilute acid solution, and then flush to sewer if local regulations allow. If not allowed, save for recovery or recycling in an approved waste disposal facility. Always dispose of in accordance with local, state and federal regulations.



SECTION 14: TRANSPORT INFORMATION

Shipping:

Usual Shipping Containers: Tank cars and trucks, drums.
Usual Shelf Life: Unlimited.
Storage/Transport Temperatures: Ambient.

Suitable Storage:

Materials/Coatings: Coated steel/plastic.

D.O.T. Information:

Labeling: Corrosive
UN Number: UN 1760
Proper Shipping Name: Corrosive liquid, n.o.s (Potassium Carbonate Liquid)
Hazard Class: 8
Packing Group: II
Placard: UN 1760
Reportable Quantity: N/A

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

SARA 313: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 313.

SARA 311/312 Hazards

EPCRA reporting quantities: TQ: 10,000 pounds (100% K₂CO₃ basis).

Massachusetts Right To Know Components

No components listed

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.

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

NFPA Rating:

Health hazard: 2

Fire Hazard: 0

Reactivity Hazard: 0

THIS INFORMATION IS DRAWN FROM RECOGNIZED SOURCES BELIEVED TO BE RELIABLE. ASHTA CHEMICALS, INC. MAKES NO GUARANTEES OR ASSUMES ANY LIABILITY IN CONNECTION WITH THIS INFORMATION. THE USER SHOULD BE AWARE OF CHANGING TECHNOLOGY, RESEARCH, REGULATIONS AND ANALYTICAL PROCEDURES THAT MAY REQUIRE CHANGES HEREIN. THE ABOVE DATA IS SUPPLIED UPON THE CONDITION THAT PERSONS WILL EVALUATE THIS INFORMATION AND THEN DETERMINE ITS SUITABILITY FOR THEIR USE. ONLY U.S.A. REGULATIONS APPLY TO THE ABOVE.

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| Version 1.0 | For the new GHS SDS Standard | Revision Date: 12/16/2014 |
| Version 1.1 | Graphics updated | Revision Date: 3/9/2015 |
| Version 1.2 | Changes to Section 2 and 9 | Revision Date: 8/20/2015 |
| Version 1.3 | Changed 'solution' to 'liquid' in all sections | Revision Date: 4/1/2016 |
| Version 1.4 | Added 47% to 'liquid' in section 1 | Revision Date: 4/15/2016 |
| Version 1.5 | Changed P501 text (Section 2) | Revision Date: 6/15/2016 |
| Removed Version | | Revision Date: 4/16/2018 |