

Print Date: March 19, 2025

# **Section 1: Product & Company Information**

Product Identifier: Potassium Carbonate Anhydrous, Dense Granular

Other Means of Identification

Product Number: 130753

**Recommended Use and Restrictions on Use** 

Recommended Use: Laboratory chemicals, manufacture of substances

Restrictions on Use: No data available.

Manufacturer / Importer / Supplier / Distributor Information

Company Name: CORECHEM Inc.

Address: 4320 Greenway Drive

Knoxville, TN 37918 USA

Information Telephone Number: 1-865-524-4239

Fax Number: 1-865-524-3375

**Website:** www.corecheminc.com **Contact Person:** Regulatory Manager

E-mail: regulatory@corecheminc.com

Emergency Phone Number: Chemtrec® 1-800-424-9300 / Outside USA 1-703-527-3887 (monitored 24 hours/day)

# **Section 2: Hazards Identification**

#### GHS Hazard Classification(s)

In accordance with OSHA Hazard Communication Standard 29 CFR 1910.1200 (HazCom 2012).

#### Physical Hazard(s)

Not classified.

# Health Hazard(s)

Acute Toxicity, Oral - 4 Corrosion/Irritation, Skin - 2 (Corrosion)Damage/Irritation, Eye -

2A

Specific Target Organ Toxicity (STOT) - Respiratory Irritation, Single exposure - 3

# Environmental Hazard(s)

Aquatic, Acute - 3

# Label Elements Signal Word

WARNING

# Hazard Symbol(s)



# Hazard Statement(s)

H302: Harmful if swallowed.

H315: Causes skin Irritation.

H319: Causes serious eye Irritation.

H335: May cause respiratory Irritation.

## Precautionary Statements General

Not applicable.



Print Date: March 19, 2025

#### Prevention

P261: Avoid breathing dust/fume/gas/mist/vapors/spray.

P264: Wash face, hands and any exposed skin thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P271: Use only outdoors or in a well-ventilated area.

P273: Avoid release to the environment.

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

#### Response

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 to fresh air and keep at rest in a position comfortable for breathing.

P304 + P312: IF INHALED: 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.

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

P321: Specific treatment (see supplemental first aid instructions on this label).

P330: Rinse mouth

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

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

P362: Take off contaminated clothing and wash before reuse.

#### Storage

P403 + P233: Store in a well-ventilated place. Keep container tightly closed.

P405: Store locked up.

# Disposal

P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

# Hazard(s) not otherwise classified (HNOC)

None known.

# Section 3: Composition/Information on Ingredients

# Substance

Chemical Identity <sup>2</sup>	Common Name/Synonym(s)	CAS # <sup>3</sup>	Weight %	Impurity or Stabilizing Additive
Potassium Carbonate	-	584-08-7	98.5 - 100%	No

<sup>1.</sup> Information regarding the composition and the percent ranges of the mixtures ingredients are not presented as it Confidential Business Information (CBI). Where a medical emergency exists (as determined by medical professional), timely disclosure of CBI is assured. The information omitted pertains to only the names of the substances and the concentration in the mixture (product) and can only be requested by a doctor/physician or Local/State/Provincial or Federal Authority.

- 2. Non-hazardous ingredients are not presented as to protect the proprietary formula of the product.
- 3. "—"Indicates ingredient is a mixture and contains multiple ingredients or may have no identifying CAS number.

# **Section 4: First-Aid Measures**

### General Information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Wash contaminated clothing before reuse.

# Inhalation

IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER OF LICENSED HEALTH CARE PROVIDER if you feel unwell.

# Skin Contact

Take off contaminated clothing and wash before reuse. IF ON SKIN: Wash with plenty of water. IF SKIN IRRITATION OCCURS: GET MEDICAL ADVICE/ATTENTION.

### **Eye Contact**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical attention.

# Ingestion

IF SWALLOWED: Call a POISON CENTER OR LICENSED HEALTH CARE PROVIDER if you feel unwell. Rinse mouth if ingested.



Print Date: March 19, 2025

# Most important symptoms/effects, acute and delayed

Symptoms

Inhalation (Breathing): Respiratory Irritation: Upper airway irritation, may cause cough, redness of mouth and upper airways.

Skin: Exposure to skin may cause redness, or irritation.

**Eye**: Eye Irritation: Exposure to eyes may cause severe irritation and redness to the eye lids, conjunctiva. There is potential for permanent and severe eye damage if not treated immediately.

**Ingestion** (**Swallowing**): Gastrointestinal System Effects: Slightly toxic on ingestion. May be severely irritating to gastrointestinal tract possibly causing oral, esophageal, glottis redness, irritation, ulceration, edema, and stomach and intestinal irritation and burns. Ingestion of large quantities may cause ulceration, vomiting, shock, and death.

### Indication of immediate medical attention and special treatment needed

#### Hazards

Repeated or prolonged contact may result in dermatitis.

Medical Conditions Aggravated by Exposure: May aggravate preexisting conditions, such as: eye disorders that decrease tear production or have reduced integrity of the eye; skin disorders that compromise the integrity of the skin.

#### **Treatment**

No data available.

# **Section 5: Fire-Fighting Measures**

#### **General Fire Hazards**

Negligible fire hazard.

#### Suitable (and Unsuitable) Extinguishing Media

**Suitable Extinguishing Media** 

Extinguishing powder, alcohol resistant foam, carbon dioxide, water fog

## **Unsuitable Extinguishing Media**

No data available.

## **Specific Hazards Arising from the Chemical**

No data available.

#### **Special Protective Equipment and Precautions for Firefighters**

# **Special Fire-Fighting Equipment Procedures**

Move container from fire area if it can be done without risk. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.

# **Special Protective Equipment for Fire-Fighters**

As in any fire, wear self-contained breathing apparatus pressure-demand (OSHA/NIOSH approved or equivalent) and full protective gear.

# **Section 6: Accidental Release Measures**

# Personal Precautions, Protective Equipment and Emergency Procedures

Evacuate spill area. Isolate hazard area and deny entry to unnecessary or unprotected personnel. Stay upwind and keep out of low area. Remove all possible sources of ignition in the surrounding area. Wear appropriate personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. See Section 8 of the SDS for Personal Protective Equipment. Ventilate contaminated area thoroughly shut off leaks if possible without personal risk.

### Methods and Materials for Containment and Clean-Up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal. Shovel dry material into suitable container. Flush spill area with water, if appropriate. Potassium carbonate will dissolve in water forming liquid potassium carbonate, which is an irritating and corrosive material. Liquid potassium carbonate is corrosive to aluminum.

# **Notification Procedures**

No data available.

# **Environmental Precautions**

Do not let product enter drains. This material is harmful to aquatic life. Keep out of water supplies and sewers. Releases should be reported, if required, to appropriate agencies.

# **Section 7: Handling and Storage**

### Precautions for Safe Handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is formed.



Print Date: March 19, 2025

#### Conditions for Safe Storage, including any Incompatibilities

Keep container tightly closed. Store in a cool, dry, well-ventilated place. Store and handle in accordance with all current regulations and standards. Keep container tightly closed and properly labeled. Granular material is slightly hygroscopic; ground material is very hygroscopic. Store in a cool, dry area.

Acids, Lime, Prolonged contact with aluminum, brass, bronze, copper, lead, tin, zinc or other alkali sensitive metals or alloys.

# Section 8: Exposure Controls/Personal Protection

#### **Control Parameters**

#### Occupational Exposure Limits

The product does not contain any relevant quantities of hazardous materials with critical values that have to be monitored in the workplace.

#### **Biological Limit Values**

The product does not contain any relevant quantities of hazardous materials with assigned biological limit values.

#### **Appropriate Engineering Controls**

Provide local exhaust ventilation where dust or mist may be generated. Ensure compliance with applicable exposure limits.

# Individual protection measures, such as personal protective equipment (PPE)

#### **General Information**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

# **Eye/Face Protection**

Wear safety glasses with side shields. Wear safety glasses with side-shields. If eye contact is likely, wear chemical resistant safety goggles. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

## **Skin Protection**

#### **Hand Protection**

Wear appropriate chemical resistant gloves.

# Other

Wear appropriate chemical resistant clothing.

### **Respiratory Protection**

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. A NIOSH approved respirator with N95 (dust, fume, mist) cartridges may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits, or when symptoms have been observed that are indicative of overexposure. When an air purifying respirator is not adequate for spills and/or emergencies of unknown concentrations, an approved self-contained breathing apparatus operated in the pressure demand mode is required. A respiratory protection program that meets 29 CFR 1910.134 must be followed whenever workplace conditions warrant use of a respirator. Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information

### **Hygiene Measures**

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated footwear that cannot be cleaned. Wash hands before breaks and immediately after handling the product. Wash contaminated clothing before reuse. Avoid contact with eyes, skin, and clothing.

# **Section 9: Physical and Chemical Properties**

Appearance:

Physical State: Solid

Color: Free-flowing, granular powder

Odor:
Odor Threshold:
No data available.

**pH:** 11.0 - 13 at 138 g/l at 25 °C (77 °F)

Melting Point/Freezing Point: 891 °C (1,636 °F)
Initial Boiling Point and Boiling
No data available.

Range:

Flash Point:

Evaporation Rate (butyl acetate=1):

Flammability (solid, gas):

Upper/Lower Limit on Flammability or Explosive Limits

Flammability Limit – Upper: No data available. Flammability Limit – Lower: No data available.



Print Date: March 19, 2025

Explosive Limit – Upper: No data available. Explosive Limit – Lower: No data available. Vapor Pressure: No data available. Vapor Density (air =1): No data available. Relative Density (water=1): 2.428 g/cm3

Solubility(ies):

Solubility in water: 138 g/l at 20  $^{\circ}$ C (68  $^{\circ}$ F) - completely soluble

Solubility (other): No data available. **Partition coefficient** No data available.

(n-octanol/water):

Auto-Ignition Temperature: No data available.

Decomposition Temperature: 212 – 392 °F
Viscosity: No data available.

Other Information:

Molecular Weight: 138.21 g/mol Formula:  $K_2CO_3$ 

# **Section 10: Stability and Reactivity**

#### Reactivity

Not reactive under normal temperatures and pressures.

#### **Chemical Stability**

Material is stable under normal conditions.

## **Possibility of Hazardous Reactions**

Avoid contact with lime to prevent formation of corrosive potassium hydroxide (KOH).

## **Conditions to Avoid**

Exposure to moisture, static discharge, shock, or vibration.

# **Incompatible Materials**

Acids, Strong oxidizing agents, lime; Prolonged contact with aluminum, brass, bronze, copper, lead, tin, zinc or other alkali sensitive metals or alloys

Hazardous Decomposition

**Products** 

Carbon oxides, Potassium oxides.

# **Section 11: Toxicological Information**

# Information on 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.

Inhalation: Inhalation of this material may cause upper airway irritation, cough, redness of mouth and upper airways.

**Skin Contact:** Exposure to skin may cause redness, irritation. This material is not a skin sensitizer based on studies with guinea pigs.

**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**

# Acute Toxicity (List all possible routes of exposure)

Oral

Potassium Carbonate: LD50 (Rat): 1,870 mg/kg

Dermal

Potassium Carbonate: LD50 (Rabbit): >2000 mg/kg

Inhalation

Potassium Carbonate: LD50 (Rat): >4.96 mg/l

### Repeated Dose Toxicity

No data available.

## Skin Corrosion/Irritation

Exposure to skin may cause redness, or irritation.

# Serious Eye Damage/Eye Irritation

Exposure to eyes may cause severe irritation and redness to the eye lids, conjunctiva. There is potential for permanent and severe eye damage if not treated immediately.



Print Date: March 19, 2025

# Respiratory/Skin Sensitization

No data available.

## Carcinogenicity

# IARC Monographs on the Evaluation of Carcinogenic Risks to Humans

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

# US. National Toxicology Program (NTP) Report on Carcinogens

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

## US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

#### **Germ Cell Mutagenicity**

In Vitro

No data available.

In Vivo

No data available.

## **Reproductive Toxicity**

No data available.

# Specific Target Organ Toxicity - Single

**Exposure** 

Category 3 - Respiratory Tract Irritation

# Specific Target Organ Toxicity - Repeated Exposure

No data available.

# **Aspiration Hazard**

Not classified.

## **Other Effects**

Chronic: Repeated or prolonged contact may result in dermatitis.

## **Ecotoxicity**

# **Acute Hazards to the Aquatic Environment**

Fish

Potassium Carbonate: LC50 (Fathead Minnow (Pimephales Promelas), 96 h): < 510 mg/l

Potassium Carbonate: LC50 Bluegill sunfish: 230 mg/L (96 hour) Potassium Carbonate: LC50 Rainbow trout: 68 mg/L (96 hour) Potassium Carbonate: LC50 Fathead minnow: 940 mg/L (24 hour) Potassium Carbonate: LC50 Fathead minnow: 820 mg/L (48 hour) Potassium Carbonate: LC50 Fathead minnow: <510 mg/L (96 hour)

### **Aquatic Invertebrates**

Potassium Carbonate: EC50 Daphnia magna: 430 mg/L (48 hour) - hard water Potassium Carbonate: EC50 Daphnia pulex: 200 mg/L (48 hour) - soft water

# **Toxicity to Aquatic Plants**

No data available.

# Chronic Hazards to the Aquatic Environment

Fish

No data available.

### **Aquatic Invertebrates**

No data available.

# **Toxicity to Aquatic Plants**

No data available.

# Persistence and Degradability

# Biodegradation

This material is inorganic and not subject to biodegradation.

# BOD/COD Ratio

No data available.



Print Date: March 19, 2025

#### **Bio-accumulative Potential**

#### **Bioconcentration Factor (BCF)**

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

#### Partition Coefficient n-octanol / water (log Kow)

No data available.

#### **Mobility in Soil**

No data available.

#### **Other Adverse Effects**

No data available.

# **Section 13: Disposal Considerations**

#### **Disposal Instructions**

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

## **Contaminated Packaging**

Handle contaminated packages in the same way as the substance itself. Emptied containers may retain hazardous residue and explosive vapors. Keep away from heat, sparks, and flames. Do not cut, puncture, or weld on or near this container. Follow label warnings until container is thoroughly cleaned or destroyed.

# **US Department of Transportation (DOT)**

This material is not regulated as a hazardous material for transport by the U.S. Department of Transportation in accordance with 49 CFR 172.101.

# **Section 15: Regulatory Information**

# **US Federal Regulations**

## Toxic Substance Control Act (TSCA), Chemical Substance Inventory, Section 8(b)

This product or ingredient(s) are listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

## Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substance List (40 CFR 302.4)

No chemical(s) in this material are subject to the reporting requirements of CERCLA.

### Clean Air Act (CAA), Section 112(r)

No chemical(s) in this material are subject to the reporting requirements of CAA.

# Emergency Planning and Community Right-To-Know Act (EPCRA)

# **EPCRA 302 Extremely Hazardous Substance**

No chemical(s) in this material are subject to the reporting requirements of SARA Title III, Section 302.

# **EPCRA 304 Emergency Response Notification**

No chemical(s) in this material are subject to the reporting requirements of SARA Title III, Section 304.

# **EPCRA 311/312 Emergency and Hazardous Materials Reporting**

Fire Hazard: No

Sudden Release of Pressure: No

Reactive: No

Acute (Immediate) Health Yes

Hazard:

Chronic (Delayed) Health No

, Hazard:

# **EPCRA 313 Toxic Chemical Release Inventory (TRI) Reporting**

This material does not contain any chemical(s) with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### **US State Regulations**

# California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)

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



Print Date: March 19, 2025

Important Note: Due to the changing nature of regulatory requirements, the information in this document should NOT be considered all-inclusive or authoritative. Users should make their own investigations to determine the suitability of the information for their particular purposes. International, Federal, State and Local regulations should be consulted to determine compliance with all required reporting requirements.

# Hazardous Materials Identification System (HMIS®) Classification

Health Hazard: 2

Chronic Health Hazard: /

Flammability: 0

Physical Hazard: 0

(Hazard Rating: 0 - Minimal / 1 - Slight / 2 - Moderate / 3 - Serious / 4 - Severe)

#### National Fire Protection Association (NFPA 704) Rating

Health Hazard: 2 Fire Hazard: 0

Reactivity Hazard: 0 Special: N/A

(Hazard Rating: 0 - Minimal / 1 - Slight / 2 - Moderate / 3 - Serious / 4 - Severe)

Prepared By: Regulatory Manager

Version #: 001

Issue Date: August 20, 2015

Last Revised By: Regulatory Assistant C

Last Revision Date: 5/1/2020 Current Revision: 02 Sections Revised: 2-11, 15

# Key to Abbreviations and

Acronyms

ATE - Acute Toxicity Estimate ACGIH - American Conference of Industrial Hygienists BCF - Bioconcentration Factor AIHA - American Industrial Hygiene Association

EC50 - Effective concentration, 50%

IDHL - Immediately Dangerous to Life and Health

Kg - Kilogram

BEI - Biological Exposure Indices

CAS - Chemical Abstracts Service

DOT - US Department of Transportation

I – Liter EPA – US Environmental Protection Agency

lb – Pound GHS - Globally Harmonized System of Classification and Labelling of Chemicals LC50 - Lethal Concentration, 50% IARC - International Agency for Research on Cancer

LD50 - Lethal Dose, 50%

IATA - International Air Transport Association

mg - milligram IBC - Intermediate Bulk Container

ml – milliliter IMDG - International Maritime Dangerous Goods

N/A – Not Applicable NIOSH – National Institute for Occupational Safety and Health

N/D – Not Determined NTP – National Toxicology Program

PEL – Permissible Exposure Limit

OSHA – US Occupational Health and Safety Administration

REL – Recommended Exposure Limit

SARA – US EPA Superfund Amendments and Reauthorization Act

STEL – Short-term Exposure Limit TSCA – US EPA Toxic Substances Control Act

TWA - Time weighted average UN - United Nations

### References

HSDB® - Hazardous Substances Data Bank

## Disclaimer

The information in this SDS was obtained from sources which we believe are reliable. HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, REGARDING ITS CORRECTNESS. The conditions or methods of handling, storage, use, and disposal of the product are beyond our control and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THE PRODUCT. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.