



Product Information (203) 740-3471 / Emergency Assistance CHEMTREC 1-800-424-9300

MATERIAL SAFETY DATA SHEETS

SECTION I

PRODUCT AND COMPANY IDENTIFICATION

Product: Carbonic Acid, disodium salt, monohydrate
This MSDS is valid for all grades and catalog #'s

Synonyms: Disodium Carbonate monohydrate
Formula: Na₂CO₃.H₂O
Manufacturer: PHARMCO-AAPER
58 Vale Road
Brookfield, Connecticut 06804, USA
Phone (203) 740-3471
Fax (203) 740-3481

1101 Isaac Shelby Drive
Shelbyville, KY 40065
Phone (502) 633-0650
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Emergency Contact:
CHEMTREC 1-800-424-9300

SECTION II

COMPOSITION / INFORMATION ON INGREDIENTS

% by weight	Material	CAS #	TLV/PE L	LC50/LD50
100	Sodium carbonate monohydrate	5968-11-6	Not available	DUST (LC50): Acute: 468 mg/m ³ 4 hours [Guinea pig]

SECTION III

HAZARDS IDENTIFICATION

Potential Acute Health Effects: Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation (lung irritant). Corrosive to eyes and skin. The amount of tissue damage depends on length of contact. Eye contact can result in corneal damage or blindness. Skin contact can produce inflammation and blistering. Severe over-exposure can produce lung damage, choking, unconsciousness or death.

Potential Chronic Health Effects: Slightly hazardous in case of skin contact (irritant)

CARCINOGENIC EFFECTS: Not available.

MUTAGENIC EFFECTS: Not available.

TERATOGENIC EFFECTS: Not available.

DEVELOPMENTAL TOXICITY: Not available.

The substance may be toxic to upper respiratory tract, skin, eyes. Repeated or prolonged exposure to the substance can

produce target organs damage. Repeated exposure of the eyes to a low level of dust can produce eye irritation. Repeated skin exposure can produce local skin destruction, or dermatitis. Repeated inhalation of dust can produce varying degree of respiratory irritation or lung damage.

SECTION IV

FIRST AID

Obtain medical attention for all cases of over-exposure.
Eye Contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.
Skin Contact: In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
Hazardous Skin Contact: Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.
Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Hazardous Inhalation: Not available.
Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.
Hazardous Ingestion: Not available.

SECTION V

FIRE FIGHTING MEASURES

Fire:
Flammability of the Product: Non-flammable.
Auto-Ignition temperature: Not applicable.
Flash point: Not applicable.
Flammable limits: Not applicable.
Products of Combustion: Not available.
Fire Hazards: Not applicable.
Explosion Hazards: Not available.
Fire Extinguishing Media: Not applicable.
Special Information: Not available.

SECTION VI

SPILL/ACCIDENTAL RELEASE MEASURES

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container. If necessary: Neutralize the residue with a dilute solution of acetic acid.

Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill: Corrosive solid.

Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Neutralize the residue with a dilute solution of acetic acid. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

SECTION VII HANDLING AND STORAGE

Precautions: Keep container dry. Do not ingest. Do not breathe dust. Never add water to this product. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes.

Storage: Hygroscopic. Keep container tightly closed. Keep container in a cool, well-ventilated area.

SECTION VIII EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: see process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection: Safety glasses or Splash goggles. Lab coat or Synthetic apron. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves (impervious).

Personal Protection in Case of a Large Spill: Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not available.

SECTION IX PHYSICAL AND CHEMICAL PROPERTIES

Physical State/Appearance: Solid. (Granular solid. Crystalline powder.)

Molecular Weight: 124 g/mole

Odor: Odorless.

Taste: Alkaline.

Color: White.

pH (1% Solution in Water): 11.6 [Basic.]

Boiling Point: Not available.

Melting Point: Not available.

Critical Temperature: Not available.

Specific Gravity: Not available.

Vapor Pressure (mm Hg): Not applicable.

Vapor Density (Air=1): Not available.

Volatility: Not available.

Odor Threshold: Not available.

Evaporation Rate: Not available.

Viscosity: Not available.

Water/Oil Dist. Coefficient: Not available.

Ionicity (in water): Not available.

Dispersion Properties: See solubility in water.

Solubility:

Soluble in hot water.

Partially soluble in cold water.

Soluble in 3 parts of cold water.

Soluble in 1.8 parts of boiling water.

Insoluble in alcohol.

Soluble in 7 parts of glycerol

SECTION X STABILITY/REACTIVITY INFORMATION

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Incompatible materials, moisture

Incompatibilities: Reactive with acids. Slightly reactive to reactive with moisture.

Corrosivity: Non-corrosive in presence of glass.

Special Information:

On Reactivity: Hygroscopic; keep container tightly closed.

Incompatible with aluminum and fluorine. Dries out somewhat in warm, dry air or above 50 C and becomes anhydrous at 100 C.

On Corrosivity: Not Available

SECTION XI TOXICOLOGICAL INFORMATION

Routes of Entry: Dermal contact. Inhalation. Ingestion.

Toxicity to Animals: WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE.

Acute toxicity of the dust (LC50): 468 mg/m³ 4 hours [Guinea pig].

Chronic Effects on Humans: May cause damage to the following organs: upper respiratory tract, skin, eyes.

Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of ingestion, of inhalation (lung irritant).

Special Information on Toxicity to Animals: Not available.

Special Information on Chronic Effects/Toxicity on Humans:

Chronic Effects: May cause adverse reproductive effects based on animal test data

Toxicity: Acute Potential Health Effects:

Skin: Causes skin irritation with possible burns depending on the concentration, site (abraded or intact skin), and duration of exposure.

Eyes: Causes eye irritation and possible burns. May cause chemical conjunctivitis. Concentrated solutions may cause permanent corneal injury (permanent corneal opacity).

Ingestion: Sodium carbonate ingestion may cause irritation of the digestive tract resulting in nausea vomiting, diarrhea,

thirst, abdominal pain depending on concentration and amount ingested. May also affect the cardiovascular system
Inhalation: Dust may cause respiratory tract and mucous membrane irritation with coughing and shortness of breath (dyspnea), pulmonary edema.

Chronic Potential Health Effects:
Chronic inhalation may result in decreased pulmonary function, nasal congestion, nosebleeds, perforation of the nasal septum. Other effects of chronic exposure are skin (dermatitis and ulceration), and gastrointestinal complaints. However, the effects of chronic exposure seem to be reversible if exposure is decreased.

SECTION XII ECOLOGICAL INFORMATION

Ecotoxicity: Not available.
BOD5 and COD: Not available.
Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.
Special Information on Products of Biodegradation: Not available.

SECTION XIII DISPOSAL CONSIDERATIONS

Waste Disposal: Recycle to process, if possible. Consult your local or regional authorities.

SECTION XIV TRANSPORTATION INFORMATION

DOT Classification: DOT Not a DOT controlled material (United States).
UN: Not applicable.
Special Provisions for Transport: Not applicable.

SECTION XV REGULATORY INFORMATION

Federal and State Regulations:
Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires emergency planning based on Threshold Planning Quantities (TPQs) and release reporting based on Reportable Quantities (RQs) in 40 CFR 355 (used for SARA 302, 304, 311 and 312).
Components present in this product at a level which could require reporting under the statute are: **NONE**
Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires submission of annual report release of toxic chemicals that appear in 40 CFR 372 (used for SARA 313). This information must be included in all MSDSs that are copied and distributed for this material.
Components present in this product at a level, which could require reporting under the statute, are: **NONE**
California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, which would require a warning under the statute: No products were found.
California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.

Other Classifications:

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WHMIS (Canada):

CLASS D-2B: Material causing other toxic effects (TOXIC).

CLASS E: Corrosive solid. Corrodes aluminum surfaces.

DSCL (EEC): R36- Irritating to eyes.

Protective Equipment:

Gloves.

Lab coat.

Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.

References: Not available.

Other Special Considerations: Not available.

The information contained herein is based on data considered to be accurate based on the material as packaged. However, no warranty is expressed regarding the accuracy of these data or the results to be obtained from the use thereof. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It is the user's obligation to determine the conditions of safe use of the product. While this MSDS is based on technical data judged to be reliable, PHARMCO-AAPER assumes not responsibility for the completeness or accuracy of the information contained herein.