



SIGMA-ALDRICH

Material Safety Data Sheet

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Version 1.40

Section 1 - Product and Company Information

Product Name Carbenicillin disodium salt
Product Number C1389
Brand Sigma Chemical

Company Sigma-Aldrich
Street Address 3050 Spruce Street
City, State, Zip, Country SAINT LOUIS, MO 63103 US
Technical Phone: 314 771 5765
Fax: 800 325 5052 **Emergency Phone:** 414 273 3850 Ext. 5996

Section 2 - Composition/Information on Ingredient

<u>Substance Name</u>	<u>CAS #</u>	<u>SARA 313</u>	<u>EC no</u>	<u>Annex I Index Number</u>
CARBENICILLIN DISODIUM	4800-94-6	No	225-360-8	

Formula C17H16N2Na2O6S
Synonyms Anabactyl, BRL-2064, Carbecin, Carbenicillin disodium salt, Carboxybenzylpenicillin sodium, CP-15-639-2, Disodium carbenicillin, Disodium alpha-carboxybenzylpenicillin, Fugacillin, Geopen, Gripenin, Hyoper, Microcillin, NSC-111071, Piopen, Pyopen, Pyopene, Sodium carbenicillin

Section 3 - Hazards Identification

Emergency Overview

Harmful.
May cause sensitization by inhalation and skin contact.

HMS Rating
Health: 3 Flammability: 0 Reactivity: 0

NFPA Rating
Health: 3 Flammability: 0 Reactivity: 0

*additional chronic hazards present.

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

Oral Exposure

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

Inhalation Exposure

If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

Dermal Exposure

In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

Eye Exposure

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Section 5 - Fire Fighting Measures

Autoignition Temp: N/A

Extinguishing Media

Suitable
Carbon dioxide, dry chemical powder, or appropriate foam.

Firefighting

Protective Equipment

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Specific Hazard(s)

Emits toxic fumes under fire conditions.

Section 6 - Accidental Release Measures

Procedure(s) of Personal Precaution(s)

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

Methods for Cleaning Up

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

Handling

User Exposure

Avoid breathing dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

Storage

Suitable

Keep tightly closed. Store at 2-8°C

Section 8 - Exposure Controls / PPE

Engineering Controls

Mechanical exhaust required.

Personal Protective Equipment

Other

Wear appropriate government approved respirator, chemical-resistant gloves, safety goggles, other protective clothing.

General Hygiene Measures

Wash thoroughly after handling. Wash contaminated clothing before reuse.

Section 9 - Physical/Chemical Properties

Appearance

Physical State

Solid

Sigma Chemical - C1389

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Sigma-Aldrich Corporation
www.sigma-aldrich.com

8-30-05

335-3.66-s0505F11.ds

Molecular Weight: 422.4 AMU

pH N/A
BP/BP Range N/A
MP/MP Range N/A
Freezing Point N/A
Vapor Pressure N/A
Vapor Density N/A
Saturated Vapor Conc. N/A
SG/Density N/A
Bulk Density N/A
Odor Threshold N/A
Volatile% N/A
VOC Content N/A
Water Content N/A
Solvent Content N/A
Evaporation Rate N/A
Viscosity N/A
Partition Coefficient N/A
Decomposition Temp. N/A
Flash Point °F N/A
Flash Point °C N/A
Explosion Limits N/A

Flammability N/A
Autoignition Temp N/A
Solubility N/A

N/A = not available

Section 10 - Stability and Reactivity

Stability
Stable.
Materials to Avoid
Oxidizing agents.

Hazardous Decomposition Products
Hazardous Decomposition Products
Carbon monoxide, Carbon dioxide, Nitrogen oxides, Sulfur oxides.

Hazardous Polymerization
Hazardous Polymerization
Will not occur.

Section 11 - Toxicological Information

Route of Exposure
Skin Contact
May cause skin irritation.
Skin Absorption
May be harmful if absorbed through the skin.
Eye Contact
May cause eye irritation.
Inhalation
May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.

Ingestion
May be harmful if swallowed.

Sensitization
Respiratory
May cause allergic respiratory reaction.

Skin
May cause allergic skin reaction.

Signs and Symptoms of Exposure
Because of the similarity in structure of the penicillins and cephalosporins, those who are allergic to one class of agents may manifest cross-allergenicity when a member of the other class is encountered. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

RTECS Number: ON9105000

Toxicity Data

Oral - Rat: > 10000 mg/kg (LD50)
Intraperitoneal - Rat: 10 GM/KG (LD50)
Subcutaneous - Rat: >10 GM/KG (LD50)
Intravenous - Rat: 6800 MG/KG (LD50)
Oral - Mouse: > 12000 mg/kg (LD50)
Intraperitoneal - Mouse: 7600 MG/KG (LD50)
Subcutaneous - Mouse: 9 GM/KG (LD50)
Intravenous - Mouse: 4500 MG/KG (LD50)
Intracerebral - Mouse: 95500 UG/KG (LD50)
Subcutaneous - Dog: >4 GM/KG (LD50)
Remarks: Gastrointestinal:Nausea or vomiting.
Intravenous - Dog: >4 GM/KG (LD50)
Remarks: Gastrointestinal:Nausea or vomiting.
Intravenous - Monkey: 9800 MG/KG (LD50)
Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye:Etosis.
Behavioral:Muscle contraction or spasticity.
Lungs, Thorax, or Respiration:Dyspnea.
Subcutaneous - Rabbit: >4 GM/KG (LD50)
Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye:Other.
Intravenous - Rabbit: >4 GM/KG (LD50)
Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye:Other.

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

Appropriate Method of Disposal of Substance or Preparation
Contact a licensed professional waste disposal service to dispose of this material.
Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.
Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT
Proper Shipping Name: None
Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA

Non-Hazardous for Air Transport: Non-hazardous for air transport.

Section 15 - Regulatory Information

EU Additional Classification

Symbol of Danger: Xn

Indication of Danger

Harmful.

Risk Statements R: 42/43

May cause sensitization by inhalation and skin contact.

Safety Statements S: 22 36/37

Do not breathe dust. Wear suitable protective clothing and gloves.

US Classification and Label Text

Indication of Danger

Harmful.

Risk Statements

May cause sensitization by inhalation and skin contact.

Safety Statements

Do not breathe dust. Wear suitable protective clothing and gloves.

United States Regulatory Information

SARA Listed: No

Canada Regulatory Information

WHMIS Classification

This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL: No

NDSL: No

Section 16 - Other Information

Disclaimer

For R&D use only. Not for drug, household or other uses.

Warranty

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2005 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.