



SIGMA-ALDRICH

Material Safety Data Sheet

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Version 1.60

Section 1 - Product and Company Information

Product Name: Ampicillin sodium salt
Product Number: A0166
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

Table with 5 columns: Substance Name, CAS #, SARA 313, EC no, Annex I Index Number. Row 1: AMPICILLIN SODIUM, 69-52-3, No, 200-708-1.

Formula: C16H18N3NaO4S
Synonyms: Alpen-N, Amcill-S, D(-)-alpha-Aminobenzylpenicillin sodium salt, Ampicillin sodium, Ampicillin sodium salt, Binotal sodium, Citteral, Domicillin, Omnipen-N, PEN A/N, Penbritin-S, Penialmen, Polycillin-N, Principen/N, Sodium D(-)-alpha-aminobenzylpenicillin, Sodium ampicillin, Sodium binotal, Sodium P-50

Section 3 - Hazards Identification

Emergency Overview: Harmful. Irritating to eyes, respiratory system and skin. May cause sensitization by inhalation and skin contact. Target organ(s): Blood.

HMIS Rating: Health: 3, Flammability: 0, Reactivity: 1

NFPA Rating: Health: 3, Flammability: 0, Reactivity: 1

*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. Water spray. 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.

Special Requirements: Hygroscopic.

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
Color Slightly yellow

Molecular Weight: 371.39 AMU

pH N/A
BP/BP Range N/A
MP/MP Range 238 °C
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
Optical Rotation Degree of Rotation:
+255 (+-5)

Solvent: H₂O 2 g/l

Solubility
Solubility in Water: 50 mg/ml H₂O, clear, very faintly yellow

N/A = not available

Section 10 - Stability and Reactivity

Stability
Stable
Stable.
Conditions to Avoid
Sensitive to moisture.
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
Causes skin irritation.
Skin Absorption
May be harmful if absorbed through the skin.
Eye Contact
Causes eye irritation.
Inhalation
May be harmful if inhaled. Material is irritating to mucous membranes and upper respiratory tract.
Ingestion
May be harmful if swallowed.

Sensitization
Sensitization
May cause allergic reaction. There are reports of serious and sometimes fatal hypersensitivity (anaphylactic) reactions occurring in people receiving penicillin therapy by the parenteral route although it has also occurred via oral administration. These reactions usually occur in individuals who have a history of sensitivity to multiple allergens, asthma, hay fever or urticaria. Ingestion has resulted in nausea, vomiting, diarrhea, glossitis, stomatitis, enterocolitis, pseudomembranous colitis. Hypersensitivity reactions: erythematous maculopapular rashes, erythema multiforme, urticaria and exfoliative dermatitis.

Target Organ(s) or System(s)
Blood.

Signs and Symptoms of Exposure
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

RTECS Number: XH8400000

Toxicity Data
Oral - Rat: > 5314 mg/kg (LD50)
Intraperitoneal - Rat: 7400 MG/KG (LD50)
Subcutaneous - Rat: >5314 MG/KG (LD50)
Oral - Mouse: > 5314 mg/kg (LD50)
Intraperitoneal - Mouse: 5700 MG/KG (LD50)
Subcutaneous - Mouse: >5314 MG/KG (LD50)

Chronic Exposure - Carcinogen
Result: This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

IARC Carcinogen List
Rating
Group 3

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: 36/37/38 42/43

Irritating to eyes, respiratory system and skin. May cause sensitization by inhalation and skin contact.

Safety Statements S: 22 26 36/37

Do not breathe dust. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing and gloves.

US Classification and Label Text

Indication of Danger

Harmful.

Risk Statements

Irritating to eyes, respiratory system and skin. May cause sensitization by inhalation and skin contact.

Safety Statements

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

US Statements

Target organ(s): Blood.

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.