BIO BASIC INC.

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MATERIAL SAFETY DATA SHEET REQUIRED UNDER SAFETY AND HEALTH REGULATION FOR SHIP REPAIRING

MANUFACTURER'S NAME: BIO BASIC INC. TEL: (905) 474 4493 FAX: (905) 474 5794 FOR CHEMICAL EMERGENCY: (416) 995 9730

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DATE UPDATED: JUNE 12, 2014

SECTION 1. - - - - - CHEMICAL IDENTIFICATION - - - - - -

Product Name Carbenicillin, Disodium Salt

Product Code(s) CDJ469

Recommended Use For Further Manufacturing Use Only

Not for Human or Animal Drug Use

Recommended Use Antibiotic/Antimycotic for cell culture

Synonyms ANABACTYL * CARBOXYBENZYLPENICILLIN SODIUM

SECTION 2. ----- HAZARDS IDENTIFICATION -----

GHS - Classification

Classification Skin Sensitizer 1B Respiratory Sensitizer 1B

Signal Word Warning





Hazard Statements H317 - May cause an allergic skin reaction H334 - May cause allergy or asthma

symptoms or breathing difficulties if inhaled

Precautionary Statements P280 - Wear protective gloves/protective clothing/eye protection/face protection

P302+ P352 - IF ON SKIN: Wash with plenty of soap and water P304 + P340 -

IF INHALED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing

SECTION 3. ---- COMPOSITION/INFORMATION ON INGREDIENTS -----

Chemical Name	EC No.	REACH Reg. No.	CAS-No	Weight %	Classification
Disodium [2S-(2.alpha.,5.alpha.,6.beta.)] -6-(carboxylatophenylacetami do)-3,3-dimethyl-7-oxo-4-thia- 1-azabicyclo[3.2.0]heptane-2- carboxylate	EEC No. 225-360-8	Not available	4800-94-6	95-100	R43

SECTION 4. ----- FIRST-AID MEASURES-----

General Advice Consult a physician.

Eye Contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a

physician

Skin Contact Wash off immediately with soap and plenty of water removing all contaminated

clothes and shoes

Inhalation Move to fresh air. If breathing is difficult, give oxygen.

Ingestion Clean mouth with water and afterwards drink plenty of water

Notes to Physician Treat symptomatically

SECTION 5. ----- FIRE FIGHTING MEASURES -----

Flammable Properties Not flammable

Flash Point Not determined

Suitable Extinguishing Media Dry chemical, CO₂, water spray or alcohol-resistant foam.

Hazardous Combustion Products Carbon oxides, Nitrogen oxides (NOx), Sulfur oxides.

Explosion Data

Sensitivity to Mechanical Impact
Sensitivity to Static Discharge
Not sensitive
Not sensitive

Protective Equipment and Precautions for FirefightersAs in any fire, wear self-contained breathing apparatus

pressure-demand, MSHA/NIOSH (approved or equivalent) and

full protective gear

SECTION 6. - - - - - ACCIDENTAL RELEASE MEASURES - - - - - -

Personal Precautions Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Avoid dust

formation.

Methods for Containment Prevent further leakage or spillage if safe to do so

Methods for Cleaning Up Pick up and transfer to properly labeled containers

SECTION 7. ----- HANDLING AND STORAGE-----

Handling Handle in accordance with good industrial hygiene and safety practice. Moisture

sensitive. Light Sensitive.

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Protect

from light. Hygroscopic.

Incompatible Products Strong oxidizing agents.

SECTION 8. - - - - EXPOSURE CONTROLS/PERSONAL PROTECTION- - - -

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Disodium			
[2S-(2.alpha.,5.alpha.,6.beta.)]-6-(
carboxylatophenylacetamido)-3,3-			
dimethyl-7-oxo-4-thia-1-azabicyclo			
[3.2.0]heptane-2-carboxylate			
4800-94-6			

Engineering Measures Showers

Eyewash stations Ventilation systems

Personal Protective Equipment

Eye/Face Protection Safety glasses with side-shields. **Skin and Body Protection** Wear protective gloves/clothing.

Respiratory ProtectionIf exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be

respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice

SECTION 9. ----- PHYSICAL AND CHEMICAL PROPERTIES -----

White to almost white **Appearance** Odor No information available **Odor Threshold** No information available **Decomposition Temperature °C** No information available **Freezing Point** No information available **Initial Boiling Point** No information available **Physical State** Amorphous Powder. Hq No data available **Flash Point** Not determined **Autoignition Temperature** No data available **Boiling Point/Range** No data available Melting Point/Range No data available

Flammability Limits in Air Upper No data available Lower No data available

Explosive Properties
Oxidizing Properties
No information available
No information available
No data available
No data available
No data available
Vapor Density
No data available
No data available
No data available
No data available

Solubility No information available

Partition Coefficient (n-octanol/water)

No data available

No information available **Viscosity**

SECTION 10. ------STABILITY AND REACTIVITY -----

Stability Stable under recommended storage conditions

Incompatible Products Strong oxidizing agents.

Conditions to Avoid Protect from light and moisture. Protect from moisture.

Hazardous Decomposition Products Carbon oxides. Nitrogen oxides (NOx). Sulfur oxides.

Hazardous Polymerization Hazardous polymerization does not occur

SECTION 11. ----- TOXICOLOGICAL INFORMATION -----

Acute Toxicity

Product Information Sensitizer.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Disodium			
[2S-(2.alpha.,5.alpha.,6.beta.)]-6-(ca			
rboxylatophenylacetamido)-3,3-dim			
ethyl-7-oxo-4-thia-1-azabicyclo[3.2.			
0]heptane-2-carboxylate			

Chronic Toxicity

Chronic Toxicity No known effect based on information supplied

Target Organ Effects None known.

SECTION 12. ----- ECOLOGICAL INFORMATION -----

Ecotoxicity

The environmental impact of this product has not been fully investigated

SECTION 13. ----- DISPOSAL CONSIDERATIONS -----

Waste Disposal Method Dispose of material in accordance with all federal, state, and local regulations

Contaminated Packaging Dispose of in accordance with all federal, state and local regulations

SECTION 14. ----- TRANSPORT INFORMATION -----

IATA Not regulated

SECTION 15. ----- REGULATORY INFORMATION -----

REACH Title VII Restrictions No information available.

Chemical Name	Dangerous Substances	Organic Solvents	Harmful Substances Whose Names Are to be Indicated on the Label	Pollution Release and Transfer Registry (Class II):	Pollution Release and Transfer Registry (Class I):	Poison and Deleterious Substances Control Law:
Disodium [2S-(2.alpha.,5.alpha.,6.beta.)]-6-(carboxylatophenylacetamido)-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylate	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

Component	ISHA - Harmful Substances Prohibited for Manufacturing, Importing, Transferring, or Supplying	ISHA - Harmful Substances Requiring Permission	Toxic Chemical Classification Listing (TCCL) - Toxic Chemicals	Toxic Release Inventory (TRI) - Group I	Toxic Release Inventory (TRI) - Group II
Disodium [2S-(2.alpha.,5.alpha.,6.be ta.)]-6-(carboxylatophenyla cetamido)-3,3-dimethyl-7-o xo-4-thia-1-azabicyclo[3.2. 0]heptane-2-carboxylate 4800-94-6 (95-100)	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

International Inventories

TSCA Does not Comply

EINECS/ELINCS Complies ENCS Complies

IECSC Does not Comply

KECL Complies

PICCS Does not Comply

AICS Complies

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard Yes
Chronic Health Hazard No

Fire Hazard No
Sudden Release of Pressure Hazard No
Reactive Hazard No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990

CERCLA

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

International Regulations

Mexico - Grade No information available.

Canada

WHMIS Hazard Class

D2A Very toxic materials D2B Toxic materials



SECTION 16. ----- OTHER INFORMATION-----

Issuing Date 13-Aug-2009 **Revision Date** 12-June-2014

Revision Note No information available.

Recommended Restrictions No information available

Disclaimer

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of MSDS