

Material Safety Data Sheet

Material Name: MEFOXIN®

*** Section 1 - Chemical Product and Company Identification ***

Manufacturer Information

Bioniche Pharma
272 E Deerpath Road
Suite 304
Lake Forest, IL 60045

Phone: 888-258-4199

Emergency # 888-875-1671

*** Section 2 - Hazards Identification ***

Emergency Overview

May cause eye, skin and respiratory tract irritation.

Potential Health Effects: Eyes

May cause eye irritation.

Potential Health Effects: Skin

May cause skin irritation.

Potential Health Effects: Ingestion

Not considered a likely route of exposure under normal product use. No adverse effects known if ingested.

Potential Health Effects: Inhalation

May respiratory tract irritation.

HMIS Ratings: Health: 1 Fire: 0 HMIS Reactivity 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

*** Section 3 - Composition / Information on Ingredients ***

CAS #	Component
33564-30-6	Sodium (6R-cis)-3-[(carbamoyloxy)methyl]-7-methoxy-8-oxo-7-(2-thienylacetamido)-5-thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylate
144-55-8	Sodium bicarbonate
77938-63-7	D-Glucose, monohydrate
7647-01-0	Hydrogen chloride

*** Section 4 - First Aid Measures ***

First Aid: Eyes

Flush eye(s) immediately with plenty of water. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

First Aid: Skin

Rinse immediately with plenty of water for at least 15 minutes.

First Aid: Ingestion

If swallowed wash mouth with water provided person is conscious. Treat symptomatically and supportively. Get medical advice if adverse symptoms appear.

First Aid: Inhalation

Avoid breathing aerosols and dusts that may be generated by handling of the product. Remove the person from the exposed area to fresh air immediately. Get medical advice if adverse symptoms appear.

*** Section 5 - Fire Fighting Measures ***

General Fire Hazards

See Section 9 for Flammability Properties.

Thermal decomposition or combustion may generate toxic and hazardous fumes (COx, NOx,SOx).

Material Safety Data Sheet

Material Name: MEFOXIN®

Hazardous Combustion Products

Thermal decomposition or combustion may generate toxic and hazardous fumes (COx, NOx,SOx).

Extinguishing Media

Use dry powder, CO2, water spray or regular foam.

Fire Fighting Equipment/Instructions

Firefighters should wear full protective gear.

NFPA Ratings: Health: 1 Fire: 0 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

*** Section 6 - Accidental Release Measures ***

Containment Procedures

Do not let the product enter drainage system, surface and ground-water and soil.

Clean-Up Procedures

Soak up with inert absorbent material, and clean with plenty of water.

Evacuation Procedures

Isolate area. Keep unnecessary personnel away.

Special Procedures

Wear appropriate personal protective equipment.

*** Section 7 - Handling and Storage ***

Handling Procedures

Wear suitable protective clothing, gloves, eye/face protection and dust mask to avoid inhalation, contact and ingestion. Do not eat, drink or smoke in work areas.

Storage Procedures

Store at 20° to 25°C (68° to 77°F). Protect from freezing and light.

*** Section 8 - Exposure Controls / Personal Protection ***

A: Component Exposure Limits

Hydrogen chloride (7647-01-0)

ACGIH: 2 ppm Ceiling

OSHA: 5 ppm Ceiling; 7 mg/m3 Ceiling

NIOSH: 5 ppm Ceiling; 7 mg/m3 Ceiling

Engineering Controls

Ensure adequate ventilation, especially in confined areas.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face

Safety glasses with side-shields

Personal Protective Equipment: Skin

Use impervious gloves.

Personal Protective Equipment: Respiratory

Breathing apparatus only if aerosol or dust is formed.

Personal Protective Equipment: General

Eye wash fountain is recommended.

*** Section 9 - Physical & Chemical Properties ***

Material Safety Data Sheet

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Appearance:	Clear to Light Amber	Odor:	None
Physical State:	Liquid	pH:	6.5
Vapor Pressure:	ND	Vapor Density:	ND
Boiling Point:	ND	Melting Point:	NA
Solubility (H2O):	Slightly Soluble	Specific Gravity:	ND
Evaporation Rate:	ND	VOC:	ND
Octanol/H2O Coeff.:	ND	Flash Point:	ND
Flash Point Method:	ND	Upper Flammability Limit (UFL):	ND
Lower Flammability Limit (LFL):	ND	Burning Rate:	ND
Auto Ignition:	ND		

*** Section 10 - Chemical Stability & Reactivity Information ***

Chemical Stability

This is a stable material.

Chemical Stability: Conditions to Avoid

Avoid heat and exposure to UV light

Incompatibility

Strong oxidizing agents

Hazardous Decomposition

Thermal decomposition or combustion may include toxic and hazardous fumes of COx, SOx, NOx.

Possibility of Hazardous Reactions

Will not occur.

*** Section 11 - Toxicological Information ***

Acute Dose Effects

A: General Product Information

No information available for the product.

B: Component Analysis - LD50/LC50

Sodium (6R-cis)-3-[(carbamoyloxy)methyl]-7-methoxy-8-oxo-7-(2-thienylacetamido)-5-thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylate (33564-30-6)

Oral LD50 Rat >10 g/kg

Sodium bicarbonate (144-55-8)

Oral LD50 Rat 4220 mg/kg

Hydrogen chloride (7647-01-0)

Inhalation LC50 Rat 3124 ppm 1 h; Oral LD50 Rat 700 mg/kg; Dermal LD50 Rabbit >5010 mg/kg

Carcinogenicity

A: General Product Information

No information available for the product.

B: Component Carcinogenicity

Hydrogen chloride (7647-01-0)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Monograph 54 [1992] (Group 3 (not classifiable))

*** Section 12 - Ecological Information ***

Ecotoxicity

A: General Product Information

No information available for the product.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Sodium bicarbonate (144-55-8)

Test & Species

Conditions

Material Safety Data Sheet

Material Name: MEFOXIN®

96 Hr LC50 Lepomis macrochirus	8250-9000 mg/L [static]
120 Hr EC50 Nitzschia linearis	650 mg/L
48 Hr EC50 Daphnia magna	2350 mg/L

Hydrogen chloride (7647-01-0)

Test & Species

96 Hr LC50 Gambusia affinis

282 mg/L [static]

Conditions

*** Section 13 - Disposal Considerations ***

US EPA Waste Number & Descriptions

Component Waste Numbers

No EPA Waste Numbers are applicable for this product's components.

Disposal Instructions

All wastes must be handled in accordance with local, state and federal regulations.

See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

*** Section 14 - Transportation Information ***

US DOT Information

Shipping Name: Not Regulated

*** Section 15 - Regulatory Information ***

US Federal Regulations

Component Analysis

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

Hydrogen chloride (7647-01-0)

SARA 302: 500 lb TPQ (gas only)

SARA 313: 1.0 % de minimis concentration (acid aerosols including mists, vapors, gas, fog, and other airborne forms of any particle size)

CERCLA: 5000 lb final RQ; 2270 kg final RQ

State Regulations

Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
Hydrogen chloride	7647-01-0	Yes	Yes	Yes	Yes	Yes	Yes

Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS #	Minimum Concentration
Hydrogen chloride	7647-01-0	1 %

Additional Regulatory Information

Material Safety Data Sheet

Material Name: MEFOXIN®

Component Analysis - Inventory

Component	CAS #	TSCA	CAN	EEC
Sodium (6R-cis)-3-[(carbamoyloxy)methyl]-7-methoxy-8-oxo-7-(2-thienylacetamido)-5-thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylate	33564-30-6	No	No	EINECS
Sodium bicarbonate	144-55-8	Yes	DSL	EINECS
Hydrogen chloride	7647-01-0	Yes	DSL	EINECS
D-Glucose, monohydrate	77938-63-7	No	No	No

* * * Section 16 - Other Information * * *

Other Information

The information herein is presented in good faith and believed to be accurate as of the effective date given. However, no warranty, expressed or implied, is given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

Key/Legend

EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration., NJTSR = New Jersey Trade Secret Registry.

End of Sheet