

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier :

Product Name: Natamycin, Pimaricin

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Food industry.

1.3. Details of the supplier of the safety data sheet

Manufacturer / Supplier : Luoyang Chihon biotechnology Co. LTD.

Address: No. 11 Qingling Rd. Industry zone, Luolang city, China

Tel: +86 379 64385550

Fax: +86 379 64382868

E-mail: chihon@chihonbio.com

Section 2: COMPOSITION / INFORMATION ON INGREDIENTS:

Ingredients:	CAS-No.	EINECS-No.	Assay
Natamycin	7681-93-8		>95%

Chemical name:

Status: WHO INN, IUPAC, CAS

(1R,3S,5R,7R,8E,12R,14E,16E,18E,20E,22R,24S,25R,26S)-22-[(3-amino-3,6-dideoxy-β-D-mannopyranosyl)oxy]-1,3,26-trihydroxy-12-methyl-10-oxo-6,11,28-trioxatricyclo[22.3.1.05,7]octacosane-8,14,16,18,20-pentaene-25-carboxylic acid

Molecular formula:

C₃₃H₄₇NO₁₃

Section 3: DESCRIPTION OF HAZARDS:

3.1 Classification of the substance or mixture

Regulation (EC) No 1272/2008 Not classified

This product is not classified as dangerous according to the CLP Regulation (EC) No 1272/2008.

3.2. Label elements

Not hazardous

3.3. Other hazards

Properties Affecting Health None known

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

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

Skin Contact. Wash skin with soap and water.

Ingestion. Clean mouth with water and drink afterwards plenty of water. Get medical attention immediately if symptoms occur.

Inhalation. Remove person to fresh air. .

4.2. Most important symptoms and effects, both acute and delayed

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Section 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Extinguishing media which must

Not be used for safety reasons high volume water jet.

5.2. Special hazards arising from the substance or mixture

None in particular.

5.3. Advice for firefighters

For personal protection see section 8.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid inhalation of dust from the spilled material. Ensure adequate ventilation. Wear appropriate personal protective equipment.

6.2. Environmental precautions

No information available.

6.3. Methods and material for containment and cleaning up

Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid the generation of dusts during clean-up.

6.4. Reference to other sections

Use personal protection recommended in Section 8.

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

As a general rule avoid all contact and inhalation of dust, mists, and/or vapors associated with the material. Clean equipment and work surfaces with suitable detergent or solvent after use. After removing gloves, wash hands and other exposed skin thoroughly. Use of a designated area is recommended for handling of potent materials.

7.2. Conditions for safe storage, including any incompatibilities

Keep/store only in original container. Keep cool. Protect from sunlight.

7.3. Specific end use(s)

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Engineering Measures Any equipment used to handle this product should be designated to minimize the escape of aerosols and vapours. Airborne exposure should be controlled primarily by engineering controls such as general dilution ventilation, local exhaust ventilation, or process enclosure. Local exhaust ventilation is generally preferred to general exhaust because it can control the contaminant at its source, preventing dispersion into the work area. An industrial hygiene survey involving air monitoring may be used to determine the effectiveness of engineering controls. Effectiveness of engineering controls intended for use with highly potent materials should be assessed by use of nontoxic surrogate materials. Local exhaust ventilation such as a laboratory fume hood or other vented enclosure is recommended, particularly for grinding, crushing, weighing, or other dustgenerating procedures.

Respiratory Protection Not required under normal use. In case of insufficient ventilation Half mask with a particle filter P2 (EN 143).

Eye Protection Wear safety glasses with side shields (or goggles).

Skin and Body Protection Wear protective gloves and protective clothing.

Hand Protection Nitril, vinyl or other impermeable gloves.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical State	solid (powder)
Appearance	Off-white to white.
Odour	Mild Organic
Odour Threshold	No information available
pH	5.5 - 7.5 (10 % suspension)
Flash Point	No information available
Melting point / Melting range	280 - 300°C
Auto ignition Temperature	150°C
Vapour Pressure	No information available
Viscosity	No information available
Partition Coefficient (n-octanol/water)	No information available
Evaporation Rate	No information available
Flammability Limits in Air	No information available

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity No data available

10.2. Chemical stability Stable under normal conditions

10.3. Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.

Product Information

	LD50 Rat Male Oral 2700mg/kg
	Species: Rat, 100 mg/kg/day Result: No adverse effects.
Acute Toxicity	Species: Ra t, 1000 ppm Dietary study Result: Lower-weight offspring.
	Species: Rabbit , 50 mg/kg/day Result: No adverse effects.
Ingestion	Toxicity Not expected
Dermal	No data available
Inhalation	No data available
Irritation	
Skin irritation	No data available
Eye irritation	No data available
Respiratory irritation	No data available
Systemic Toxicity	No data available
Mutagenic effects	No data available
Carcinogenicity	No data available
Reproductive effects	No data available
Component Information	Classification based on data available for ingredients

1	Dermal	No data available
	Inhalation	No data available
0	Eye irritation	No data available
	Skin irritation	No data available
	Mutagenic effects	No data available
4		

Conditions to avoid Extremes of temperature and direct sunlight Avoid dust formation

10.5. Incompatible materials Strong oxidizing agents.

10.6. Hazardous decomposition products Irritating and/or toxic fumes or gases. Emits toxic fumes under fire conditions. NOx.

Section 11: TOXICOLOGY INFORMATION

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

This product is not classified as dangerous to the environment according to the CLP Regulation (EC) No 1272/2008. (During the transitional period the Dangerous Substance Directive 67/568/EEC and the Preparation Directive 99/45/EC, remains applicable).

12.2. Persistence and degradability Persistence and degradability

Product is biodegradable.

12.3. Bioaccumulative potential Bioaccumulative potential

Bioaccumulation is unlikely.

12.4. Mobility in soil Mobility in soil

Will likely be mobile in the environment due to its water solubility but will likely degrade over time.

12.5. Results of PBT and vPvB assessment Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

12.6. Other adverse effects

None known.

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations.

Contaminated Packaging Dispose of empty containers and wastes safely. Dispose of waste product or used containers according to local regulations.

Section 14: TRANSPORTATION INFORMATION

14.1. UN number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3. Transport hazard class(es)	Not regulated
14.4. Packing group	Not regulated
14.5. Environmental hazards	Not regulated
14.6. Special precautions for user	Not regulated
14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not regulated

Section 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

US federal regulations CERCLA/SARA Hazardous Substances:

Not applicable. One or more components are not listed on TSCA.

Superfund Amendments and Reauthorization Act of 1986 (SARA) Hazard categories

Immediate Hazard: No

Delayed Hazard: No

Fire Hazard: No

Pressure Hazard: No

Reactivity Hazard: No

SARA 302 Extremely hazardous substance: No

SARA 311/312 Hazardous chemical: No

Other federal regulations

Safe Drinking Water Act (SDWA): Not regulated.

Food and Drug Administration (FDA): Not regulated.

US state regulations: This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm. California Safe

Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

15.2. Chemical safety assessment

Not applicable

Section 16: OTHER INFORMATION:

The information contained herein is based on our current knowledge of the underlying data and is intended to describe the product for the purpose of health, safety and environmental requirements only. No warranty or guarantee is expressed or implied regarding the accuracy of these data or the results to be obtained from the use of this product.