SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Jena Bioscience

Nourseothricin - Powder

NTC or clonNAT
powder (non-sterile)

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Name:	Nourseothricin (NTC) - Powder
Catalog Number:	AB-102L;AB-102XL;AB-102-25G;AB-102-100G
Supplier:	Jena Bioscience GmbH Loebstedter Strasse 71 07749 Jena, Germany
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2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS classification according to Regulation (EC) No 1272/2008
Acute toxicity (Category 4), H302
Skin Irritation (Category 2), H315
Eye Irritation (Category 2), H319
Specific target organ toxicity - single exposure (Category 3), H335

Label elements

Pictogram:

Signal word: Warning

Hazard statements:

H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

Precautionary statements:

P280	Wear protective gloves, protective clothing and eye protection.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Additional information:

Laboratory chemicals must be handled only by qualified personnel and with precaution.

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3. COMPOSITION/INFORMATION ON INGREDIENTS

Nourseothricin dihydrogen sulfate

Synonyms:	Streptothricin components C, D, E and F (mixture), 3aS-[2(R*),3aa,7aß]]-2-[[4-O-(Aminocarbonyl)-2-deoxy-2-[(3,6-diamino-1-oxo-hexyl)-amino]-ß-Dgulopyranosyl]amino]-3,3a,5,6,7,7a hexahydro-7-hydroxy-4H-imidazo-[4,5-c]pyridin-4-on dihydrogen sulfate (Streptothricin F)
Formula:	$C_{19}H_{34}N_8O_8 \cdot H_2SO_4$ (Streptothricin F)
Molecular Weight:	600.6 g/mol (Streptothricin F)
CAS-No.:	96736-11-7
EC number:	
Classification:	Acute Tox. 4, H302 – Skin Irrit.2, H315 – Eye Irrit.2, H319 – STOT SE 3, H335
Concentration:	

4. FIRST AID MEASURES

General advice:
Immediately remove any contaminated clothing. If problems occur, consult a physician. Show this material safety data sheet to the doctor in attendance.

After skin contact:
Immediately wash skin with soap and plenty of water. If skin irritation continues, consult a physician.

After swallowing:
Rinse mouth with water, drink plenty of water and induce vomiting provided the person is conscious. Never give anything orally to an unconscious person. Consult a physician.

After inhalation:
Remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. Consult a physician in case of complaints.

After eye contact:
Immediately flush eyes with plenty of water for at least 15 minutes. Consult a physician.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Water spray, carbon dioxide, dry chemical powder or appropriate foam. Do not use water jet.

Specific hazards arising from the chemical:
No data available

Special Firefighting Procedures:
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes if necessary.

Unusual Fire and Explosions Hazards:

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Emits Toxic Fumes (NOx, SOx) under Fire Condition.
Flash point: N/A
Autoignition Temp: N/A
Flammability: N/A

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Wear protective equipment. Keep unprotected persons away. Avoid dust formation. Wash contaminated clothing before reuse.

Environmental precautions
Do not let product enter drains.

Methods and materials for containment and cleaning up
Absorb on sand or vermiculite and place in closed containers for disposal. Dispose contaminated material as waste according to section 13. Ventilate area and wash spill site after material clean-up is complete.

7. HANDLING AND STORAGE

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

User Exposure:
Avoid inhalation. Use personal protective equipment (i.e. impermeable gloves, lab coat or appr.).

Storage
Keep container tightly closed. Protect from atmospheric humidity.

Recommended storage temperature: Store at 4 °C

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Measures:
Ensure adequate ventilation and cleanable resistant tightly sealed working surfaces.

Respiratory protection:
Required if aerosols can be formed.Hand protection: Handle with gloves to prevent skin contact.

Eye protection:
Wear chemical safety goggles to prevent eye contact.

Skin and body protection:
Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

General Hygiene measures:

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Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form:	Non-sterile powder
Form:	odorless

Safety data

pH:	
Melting point:	no data available
Boiling point:	100°C
Flash point:	The product is not flammable.
Ignition temperature:	no data available
Lower explosion limit:	The product is non-explosive.
Upper explosion limit:	The product is non-explosive.
Water solubility:	soluble up to 1000 mg/ml

10. STABILITY AND REACTIVITY

Storage stability
Stable under recommended storage conditions.

Reactivity:
No dangerous reactions expected.

Chemical stability:
Stable under recommended storage conditions for 12 months at -20°C.

Possibility of hazardous reactions:
No data available

Conditions to avoid:
High concentrations of acids or bases, strong oxidizing agents, heat, moisture, light.

Incompatible materials:
No data available

Hazardous decomposition products:
Carbon monoxide, Carbon dioxide, Nitrogen oxides (under fire conditions).

11. TOXICOLOGICAL INFORMATION

Acute toxicity
LD50 Intravenous rat: 20.8 mg/kg

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LD50 oral rat: 1185 mg/kg

Serious eye damage/irritation:
Irritating effect.

Respiratory or skin sensitization:
Irritant to skin and mucous membranes. Irritations in the respiratory tract, coughing, dyspnea.

Germ cell mutagenicity:
No data available

Carcinogenicity:
No data available

Reproductive toxicity:
No data available

Additional information:
RTECS: RD4240000

Further information:
To the best of our knowledge, the toxicological properties have not been thoroughly investigated. Further hazardous properties cannot be excluded. The product should be handled with the care usual when dealing with chemicals.

12. ECOLOGICAL INFORMATION

Ecotoxicity:
No data available

Persistence and degradability:
Biodegradability

Bioaccumulative potential:
No data available

Mobility in soil:
No data available

General notes:
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water. Do not allow product to reach ground water, water course or sewage system.

13. DISPOSAL CONSIDERATIONS

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Product
Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dispose as hazardous waste.

Contaminated packaging
Dispose of as unused product.

14. TRANSPORT INFORMATION

14.1 UN number
Not dangerous goods

14.2 UN proper shipping name
ADR/RID: Not dangerous goods
IMDG: Not dangerous goods
IATA: Not dangerous goods

14.3 Transport hazard class(es)
ADR/RID/IMDG/IATA: Not dangerous goods

14.4 Packaging group
ADR/RID/IMDG/IATA: Not dangerous goods

14.5 Environmental hazards
ADR/RID: no
IMDG Marine pollutant: no
IATA: no

14.6 Special precautions for user
see chapter 6 - 8

15. REGULATORY INFORMATION

OSHA Hazards:
Harmful by ingestion, causes irritation of skin and eyes, may cause respiratory irritation.
This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.1 Safety, health and environmental regulations / legislation specific for the substance or mixture:
No data available

15.2 Chemical Safety Assessment:
No data available

15.3 Information about limitation of use:
Employment restrictions concerning juveniles must be observed.

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Employment restrictions concerning pregnant and lactating women must be observed.
Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

16. OTHER INFORMATION

Further information

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