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
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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: Warning
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.

3. COMPOSITION/INFORMATION ON INGREDIENTS
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:
Emits Toxic Fumes (NOx, SOx) under Fire Condition.
SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

Nourseothricin - Powder
NTC or clonNAT
powder (non-sterile)

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:
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.
Nourseothricin - Powder
NTC or clonNAT
powder (non-sterile)

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Form: non-sterile beige 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
LD50 oral rat: 1185 mg/kg
Nourseothricin - Powder
NTC or clonNAT powder (non-sterile)

**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**

**Product**
Nourseothricin - Powder
NTC or clonNAT
powder (non-sterile)

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.
Employment restrictions concerning pregnant and lactating women must be observed.
Nourseothricin - Powder
NTC or clonNAT
powder (non-sterile)

Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

16. OTHER INFORMATION
Further information
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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.

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