



Address: East of Tianmu Road, Laiyang Development
Zone, Yantai City, Shandong Province, 265200, China

MATERIAL SAFETY DATA SHEET

1. PRODUCT

- 1.1 Product Name: NRise™ Nicotinamide Riboside Chloride (NR)
- 1.2 Molecular Formula: $C_{11}H_{15}N_2O_5 \cdot Cl$
- 1.3 Molecular Weight: 290.70
- 1.4 CAS Number: 23111-00-4
- 1.5 Synonyms: Nicotinamide riboside, Nicotinamide riboside chloride

2. HAZARD IDENTIFICATION

Consideration of human and environmental hazards.

In addition to the usual general precautions that should be observed when handling chemical compounds and recombinant proteins, there is at the date indicated above no indication of any particular hazardous properties.

NOTE: irritating to eyes, respiratory system and skin. Slightly hazardous to water and ground.

3. COMPOSITION

NAME: Nicotinamide Riboside Chloride (NR)

CAS#: 23111-00-4

EC#: 200-184-4

Molecular Formula: $C_{11}H_{15}N_2O_5 \cdot Cl$

Molecular Weight: 290.7 g/mol

NOTE: Labelling not required and contains no hazardous substances in concentrations to be declared.

4. FIRST AID MEASURES

Inhalation: If inhaled, remove victim to fresh air. If the victim stop breathing, give artificial respiration.

Skin Contact: Rinse with soap and plenty of water.

Eye Contact: Rinse your eyes with water as a precaution above 15 minutes.

Ingestion: Do not feed anything from the mouth of an unconscious person. Rinse your mouth with water.

5. FIRE FIGHTING MEASURES

Extinguishing Media: No restriction.

Decomposition: Dangerous decomposition is not anticipated.

6. ACCIDENTAL RELEASE MEASURES



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If Spilt: Carefully sweep up avoiding dust formation.

Absorbent Material: N/A.

Special Measures: It is not necessary to put special measures in place for this product.

7. HANDLING AND STORAGE

Safe Handling: Avoid inhalation and minimize repeated or prolonged exposure.

Avoid contact with eyes, skin, and clothing.

Storage: Sealed packaging, store in dry, cool and dark place. Refrigerate at +2 °C to +8 °C (short-term; < 6 months) or -20°C (long-term; >6 months).

NOTE: This product is shipped at ambient temperature. Ensure tight seal. Do Not Store Together With: No restriction.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General Hygiene Measures: Wash hands thoroughly after use and before breaks.

Respiratory Protection: Appropriate filter to be used during handling.

Eye Protection: Chemical safety goggles.

Hand Protection: Protective gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form: Solid/Powder

Color: White or off-white.

Fire Promoting: No oxidizing properties.

PH: 2.0~4.0

Solubility: Very soluble. Soluble to 100 mM in DMSO and to 100 mM in water.

10. STABILITY AND REACTIVITY

Hazardous Reactions: None under normal use.

Hazardous Decomposition Products: No data.

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Signs and Symptoms of Exposure:

The chemical, physical and toxicological properties have not been thoroughly investigated. However, intoxication has so far not become known.

Route of exposure:

Skin Contact: Skin irritation may be caused.

Skin Absorption: May be harmful.

Eye Contact: Eye irritation may be caused.

Inhalation: May be harmful to mucous membranes and upper respiratory system.

Ingestion: May be harmful.



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12. ECOLOGICAL INFORMATION

Water Hazard Class: 1 (German regulations [VwVwS]).

13. DISPOSAL CONSIDERATIONS

Contents: After dilution this product can be disposed of in general waste water according to local regulations.

Packaging: Non-contaminated outer paper packaging should be re-used or re-cycled as for any general paper waste. Packaging (glass vial, rubber bung and cap) used to contain this product should be disposed of in accordance with local regulations, i.e. the same as for any general chemical compound.

14. TRANSPORT INFORMATION

Non-hazardous for road (RID/ADR), sea (IMDG) and air (IATA/ICAO) transport.

DOT Classification: Not a DOT controlled material (United States).

The above captioned goods are non-hazardous materials for air transportation in any nature.

The report according of the IATA Dangerous Goods Regulations 63th Edition 2022 may be transported and applicable.

15. REGULATORY INFORMATION

U.S. Regulations:

U.S. CERCLA/SARA/TSCA Regulatory Information: The following chemicals are listed under the following TSCA/SARA/CERCLA lists. Refer to TSCA regulation if you need a definition for acronyms that may be shown in the TSCA Inventory field in the table below

Canadian Regulations:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

16. FURTHER INFORMATION

The above information has been presented to the best of our knowledge and is believed to be correct. However, it may not be accurate or inclusive, should only be used as a guide, and is provided without warranty of any kind.

Among others, the recipient of this product is responsible for considering appropriate safety precautions and ensuring that existing laws and guidelines are fully observed. We will not be held liable for damages resulting from handling, contact or use of this product.