



Material Safety Data Sheet

Nisin

1. Chemical Product & Company Identification

Product Name: Nisin
Company: Shandong Freda
biotechnology Co., Ltd
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2. Composition/Information on Ingredients

Product Name: Nisin (min. 2.5%)
E-number: E234
CAS No.: 1414-45-5
Molecular: $C_{143}H_{228}O_{37}N_{42}S_7$
Ingredient: Nisin, NaCl

3. Hazards Identification

Hazards categories: Not applicable

4. First Aid Measures

Eye Contact: Flush eyes with plenty of water
for at least 15 minutes.
Skin Contact: Flush skin with plenty of water or
with a disinfectant soap.
Inhalation: Move to fresh air.
Ingestion: Wash out mouth with water.
Note: If necessary, get medical
attention.

5. Fire Fighting Measures

Extinguishing media: Use dry chemical powder, water
spray, dry chemical powder or
foam.
Protective equipment: Wear shell-contained breathing
apparatus and protective
clothing to prevent contact with
skin and eyes.

6. Accidental Release Measures

Procedures of personal precautions: Use appropriate personal
protection. Prevent forming of
dust clouds.
Methods for cleaning up: Sweep up with spade and
transfer to a dry, clean, lidded
container for disposal. Avoid
raising dust. Wash spill site after
material pickup is complete.

7. Handling and storage

Handling precaution: Wear suitable protective
clothing and chemical safety
gloves. In case of insufficient
ventilation, wear suitable
respiratory equipment. Wash
thoroughly after handling. Keep
away from incompatibles or
ignition sources, heat and flame.
Storage: Store in a cool, well-ventilated
area and keep in a tightly closed
container. Keep away from
direct sunlight



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8. Exposure Controls/Personal Protection

Engineering Controls:	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits.
Personal Protection:	
Respiratory:	Wear dust mask if needed.
Eye:	Goggles.
Clothing:	Protective clothing.
Hand:	Chemical-resistant gloves.

9. Physical and Chemical Properties

Appearance:	Light brown powder
Odor:	Odorless
Solubility:	Soluble in water

10. Stability and Reactivity

Stability:	Stable under normal conditions as recommended.
Conditions to avoid:	None
Hazardous decomposition products:	None

11. Toxicological Information

Toxicity data:	Oral Rat LD ₅₀ 9.26 g/kg (male), LD ₅₀ 6.81g/kg (female).
Irritation Data:	Maybe cause eyes and skin mild irritation.

12. Ecological Information

No data available.

13. Disposal Considerations

Disposal:	Dispose in accordance with national, state and local environmental control regulations.
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14. Transport Information

DOT Class:	Hazard	Not hazardous for transport.
IATA:		Not hazardous for air transport.
IMO		Not hazardous for sea transport.

15. Regulatory Information

Regulation:	Not classified as dangerous according to EU-directive 91/155
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16. Other Information

Warning:	This product is a chemical substance and is intended to be used by persons having chemical knowledge and skill, at their own discretion and risk.
Disclaimer:	The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.