



American International Chemical, Inc.

Corporate Offices: (800) 238-0001

Internet: www.aicma.com Email: info@aicma.com

MATERIAL SAFETY DATA SHEET

NISIN

SECTION 1 - CHEMICAL PRODUCT AND COMPANY INFORMATION

American International Chemical, Inc.	Emergency Number: Chemtrec	800-424-9300
135 Newbury Street		703-527-3887
Framingham, MA 01701	Information Number:	800-238-0001

Date: August 2007

Synonyms: None Known

CAS #: 1414-45-5

DOT Hazard Class: Not Regulated

SECTION 2 - COMPOSITION AND INFORMATION ON INGREDIENTS

Nisin - 99% min.

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: A light brown to off white powder, that presents little or no health hazard and no unusual hazard if involved in a fire.

POTENTIAL HEALTH EFFECTS:

Skin: May cause skin irritation.

Eyes: May cause irritation or burning.

Inhalation: May cause irritation to the respiratory tract.

Ingestion: Not a hazard with normal industrial usage.

CARCINOGENICITY: Not Identifiable

SECTION 4 - FIRST AID MEASURES

Skin: Immediately wash skin with soap and water for at least 15 minutes.

Eyes: Immediately flush with plenty of water for at least 15 minutes, holding eye lids apart.

Inhalation: Remove to the fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

Ingestion: Wash out mouth with water.

On All Of The Above: Consult a physician if symptoms persist.

SECTION 5 - FIRE FIGHTING MEASURES

Flash Point: Non Combustible

Flammable Limits: Non Combustible

Extinguishing Media: Use media that is appropriate to treat surrounding fire.

Special Fire Fighting Procedures:

Use fire fighting procedure that is appropriate to treat surrounding fire. All firefighters should use self-contained breathing apparatus and full fire-fighting turn-out gear.

Unusual Fire Explosion Hazard: During a fire, irritating and highly toxic gasses may be generated by thermal decomposition or combustion.

Auto Ignition Temperature: Not Applicable

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Contain spill, sweep up, collect and place in a disposal container. Avoid runoff into storm sewers and ditches, which lead to waterways.

SECTION 7 - HANDLING AND STORAGE

Avoid contact with skin, eyes and clothing. Use with adequate ventilation. Avoid breathing dust. Use normal personal hygiene and housekeeping. Store in cool [below 10°C] dry area away from other incompatible materials. Product is slightly hygroscopic and should be stored in a dry area to prevent moisture pick up and caking.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

RESPIRATORY PROTECTION: Use NIOSH/MSHA approved respirators.

VENTILATION REQUIREMENTS: Ventilate as necessary to eliminate dust from the work area and maintain concentrations below the limit.

SKIN AND EYE PROTECTION: Use rubber or neoprene gloves, chemical goggles and clothing sufficient to protect skin and eyes from dust.

WORK, HYGIENIC PRACTICES:

As required to protect skin and eyes from dust, safety showers and/or eye wash should be available. Do not leave food or smoke in work area. Wash thoroughly and remove or clean any contaminated clothing.

EXPOSURE LIMITS: None Established

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: Not Available

Vapor Pressure (MM Hg): Not Available

Vapor Density (AIR=1): Not Applicable

Specific Gravity (H₂O=1): Not Available

Percent Volatile by Volume (%): Not Applicable

Melting Point: Not Applicable

Evaporation Rate (Butyl Acetate=1): Not Applicable

Solubility in Water: Not Available

pH: 3.10-3.60 (10% aqueous solution)

SECTION 10 - STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under normal temperatures and pressures.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, Carbon dioxide, Nitrogen oxides and Sulfur oxides.

SECTION 11 - TOXICOLOGICAL INFORMATION

Not Available

SECTION 12 - ECOLOGICAL INFORMATION

Not Available

SECTION 13 - DISPOSAL CONSIDERATIONS

Dispose of in accordance with all federal, state and local regulations.

RCRA WASTE #: Not Listed

SECTION 14 - TRANSPORTATION INFORMATION

D.O.T. SHIPPING NAME: NISIN

SECTION 15 - REGULATORY INFORMATION

OSHA STATUS: Not listed

TSCA STATUS: Listed

CERCLA REPORTABLE REQUIREMENTS: (RQ) None

SARA TITLE III INFORMATION:

Section 302 Extremely Hazardous Substance Not listed

Section 313 Toxic Chemicals: Not listed

Section 311/312 Hazard Category: Not considered a hazard.

SECTION 16 - OTHER INFORMATION

Reason for Issue: Changed Date

This information is given without any warranty or representation. It is believed to be correct but does not claim to be all-inclusive and shall be used only as a guide. American International Chemical, Inc., shall not be held liable for any damage resulting from handling or contact with the above product. It is offered solely for your consideration, investigation and verification.