

Safety Data Sheet: NutriZyme®

SECTION 1: PRODUCT IDENTIFICATION

Product Identifier

Product Form: Mixture

Product Name: NutriZyme®

Intended Use of the Product

Animal Feed Supplement

Name, Address, and Telephone of the Responsible Party

Company

Feed Sources, LLC

1916 Gallagher Drive

Sherman, TX 75090

Office: 1-972-996-6965

www.feedsources.com

SECTION 2: HAZARD(S) IDENTIFICATION

Classification

Carcinogen – category 1

Specific Target Organ Toxicity Single Exposure – Category 3
(Respiratory System)

Specific Target Organ Toxicity Repeat Exposure – Category 1
(Respiratory System)

Labeling

Pictograms



Signal Word(s): Danger

Hazard Statements:

May cause respiratory irritation.

May cause damage to lungs through prolonged or repeated exposure when inhaled.

May cause cancer through inhalation.

Precautionary Statements:

Wash exposed skin thoroughly after handling. Do not breathe dust. Use only in well-ventilated areas or outdoors.

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

If concerned: get medical advice. Dispose of contents or containers in accordance with applicable regulations.

Other Hazards: Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Name	Product Identifier (CAS number)	% (w/w)
Yeast extract	8013-01-2	
Active yeast	68876-77-7	
Bentonite	1302-78-9	
Limestone	1317-65-3	
Bacillus subtilis	68038-70-0	
Crystalline Silica	14808-60-7	

SECTION 4: FIRST AID MEASURES

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: Using proper respiratory protection, move the exposed person to fresh air at once. Encourage exposed person to cough, spit out, and blow nose to remove dust. Immediately call a poison center, physician, or emergency medical service.

Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.

Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

Most important symptoms and effects, both acute and delayed: This product contains crystalline silica, which has been classified by IARC as (Group I) carcinogenic to humans when inhaled. Inhalation of silica can also cause a chronic lung disorder, silicosis.

Note to Physician: Provide general supportive measures and treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO₂).

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire. Do not use halogenated compounds.

Special Hazards Arising from the Substance or Mixture

Fire Hazard: Combustible Dust.

Explosion Hazard: Dust explosion hazard in air.

Reactivity: Hazardous reactions will not occur under normal conditions.

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Carbon oxides (CO, CO₂). Calcium oxide. Smoke.

Other Information: Risk of dust explosion.

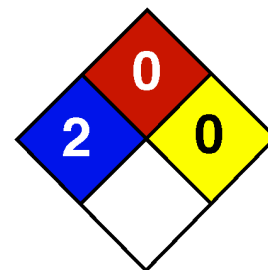
NFPA:

Health (blue) – 2: Hazardous-use breathing apparatus

Flammability (red) – 0: Non-flammable

Reactivity (yellow) – 0: Stable

Special (white) – none



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SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid prolonged contact with eyes, skin and clothing. Avoid breathing dust. Avoid generating dust. Remove ignition sources. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.

For Non-Emergency

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

Environmental Precautions Prevent entry to sewers and public waters.

Methods and Material for Containment and Cleaning Up

For Containment: Contain solid spills with appropriate barriers and prevent migration and entry into sewers or streams. Avoid generation of dust during clean-up of spills.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Vacuum clean-up is preferred. If sweeping is required use a dust suppressant.

SECTION 7: HANDLING & STORAGE

Precautions for Safe Handling

Additional Hazards When Processed: Accumulation and dispersion of dust with an ignition source can cause a combustible dust explosion. Keep dust levels to a minimum and follow applicable regulations.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations. Avoid creating or spreading dust. Use explosion-proof electrical, ventilating, lighting equipment. Proper grounding procedures to avoid static electricity should be followed.

Storage Conditions: Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Relative humidity should not exceed 75%.

Incompatible Materials: Strong acids, strong bases, strong oxidizers.

Storage Temperature: < 32 °C (75 °F)

Specific End Use: Animal Feed Supplement

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government

Particulates not otherwise classified (PNOC)		
USA ACGIH	ACGIH TWA (mg/m ³)	3 mg/m ³ Respirable fraction 10 mg/m ³ Total Dust
USA OSHA	OSHA PEL (TWA) (mg/m ³)	5 mg/m ³ Respirable fraction 15 mg/m ³ Total Dust
Alberta	OEL TWA (mg/m ³)	10 mg/m ³ (total) 3 mg/m ³ (respirable)

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British Columbia	OEL TWA (mg/m ³)	10 mg/m ³ (total dust) 3 mg/m ³ (respirable fraction)
Manitoba	OEL TWA (mg/m ³)	10 mg/m ³ (inhalable particles, recommended) 3 mg/m ³ (respirable particles, recommended)
New Brunswick	OEL TWA (mg/m ³)	3 mg/m ³ (particulate matter containing no Asbestos and <1% Crystalline silica, respirable fraction) 10 mg/m ³ (particulate matter containing no Asbestos and <1% Crystalline silica, inhalable fraction)
Newfoundland & Labrador	OEL TWA (mg/m ³)	10 mg/m ³ (inhalable particles, recommended) 3 mg/m ³ (respirable particles, recommended)
Nova Scotia	OEL TWA (mg/m ³)	10 mg/m ³ (inhalable particles, recommended) 3 mg/m ³ (respirable particles, recommended)
Nunavut	OEL TWA (mg/m ³)	5 mg/m ³ (respirable mass) 10 mg/m ³ (total mass)
Northwest Territories	OEL TWA (mg/m ³)	5 mg/m ³ (respirable mass) 10 mg/m ³ (total mass)
Ontario	OEL TWA (mg/m ³)	10 mg/m ³ (inhalable) 3 mg/m ³ (respirable)
Prince Edward Island	OEL TWA (mg/m ³)	10 mg/m ³ (inhalable particles, recommended) 3 mg/m ³ (respirable particles, recommended)
Québec	VEMP (mg/m ³)	10 mg/m ³ (including dust, inert or nuisance particulates; containing no Asbestos and <1% Crystalline silica-total dust)
Saskatchewan	OEL STEL (mg/m ³)	20 mg/m ³ (insoluble or poorly soluble-inhalable fraction) 6 mg/m ³ (insoluble or poorly soluble-respirable fraction)
Saskatchewan	OEL TWA (mg/m ³)	10 mg/m ³ (insoluble or poorly soluble-inhalable fraction) 3 mg/m ³ (insoluble or poorly soluble-respirable fraction)

Exposure Controls

Appropriate Engineering Controls: Emergency eye wash stations should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed. Use local exhaust or general dilution ventilation or other suppression methods to maintain dust levels below exposure limits. Power equipment should be equipped with proper dust collection devices.

Personal Protective Equipment: Gloves. Protective clothing. Protective goggles. Dust formation: dust mask.



Materials for Protective Clothing: Wear suitable protective clothing.

Hand Protection: Wear protective gloves.

Eye Protection: Safety glasses.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	: Powder
Appearance	: Light to dark brown powder
Odor	: Yeast, fermented smell
Odor Threshold	: Not available

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pH	: Not available
Melting Point	: Not available
Freezing Point	: Not available
Boiling Point	: Not available
Flash Point	: Not available
Auto-ignition Temperature	: Not available
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not available
Lower Explosive Limit	: Not available
Upper Explosive Limit	: Not available
Vapor Pressure	: Not available
Relative Vapor Density at 20 °C	: Not available
Relative Density	: Not available
Specific gravity / density	: Negligible in water
Solubility	: Not available
Partition Coefficient: N-Octanol/Water	: Not available
Viscosity	: Not expected to present an explosion hazard due to mechanical impact.
Explosion Data – Sensitivity to Mechanical Impact	: Static discharge could act as an ignition source.

SECTION 10: STABILITY & REACTIVITY

Reactivity: Hazardous reactions will not occur under normal conditions.

Chemical Stability: Stable under recommended handling and storage conditions (see section 7).

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Direct sunlight, extremely high or low temperatures, and incompatible materials. Sparks, heat, open flame and other sources of ignition. Generation of airborne dust.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Health Effects: see First Aid discussion in Section 4.

Routes of Exposure: see First Aid discussion in Section 4.

Symptoms Related to Exposure: see First Aid discussion in Section 4.

Carcinogen Listing: This product contains crystalline silica, which has been classified by IARC as (Group 1) carcinogenic to humans when inhaled.

SECTION 12: ECOLOGICAL INFORMATION

Eco toxicity - Not classified.

Persistence and Degradability Not established

Bioaccumulative Potential Not established

Mobility in Soil Not available

Other Adverse Effects Not available

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, and international regulations

SECTION 14: TRANSPORT INFORMATION

In Accordance with DOT: Not regulated for transport

In Accordance with IMDG: Not regulated for transport

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In Accordance with IATA: Not regulated for transport

In Accordance with TDG: Not regulated for transport

SECTION 15: REGULATORY INFORMATION

US Federal and International Regulations

SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Listed on the AICS (Australian Inventory of Chemical Substances)	
Listed on the Canadian DSL (Domestic Substances List)	
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)	
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)	
Listed on the Korean ECL (Existing Chemicals List)	
Listed on NZIoC (New Zealand Inventory of Chemicals)	
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Listed on INSQ (Mexican national Inventory of Chemical Substances)	

US State Regulations

Neither this product nor its chemical components appear on any US state lists.

Canadian Regulations

WHMIS Classification	Uncontrolled product according to WHMIS classification criteria
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria

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

SECTION 16: OTHER INFORMATION

Document Preparation by:

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Feed components generally produce a limited amount of dust in manufacturing and handling of the material. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person. Each individual should make a determination as to the suitability of the information for their particular purpose(s). Accordingly, Feed Sources, LLC provides no warranties; either expressed or implied, and assumes no responsibility for the accuracy or completeness of data contained herein or liable for any claims, losses or damages resulting from the use of or reliance upon or failure to use this information.