SAFETY DATA SHEET

Section 1. Chemical Product & Company Identification

Essence Chemical Co. LLC PO BOX 656

Saint Peters, Mo. 63376 636-685-0132

Product Name: BIO-ZYME PLUS

Product Use: BACTERIA BLEND FOR ODOR CONTROL

Product Code: 799

EMERGENCY NUMBER: 1-800-535-5053

Section 2. Hazards Identification

Physical Hazards: Not Classified

Health Hazards: Skin corrosion/irritation Category 3

Causes serious eye damage/irritation Category 1
Acute Toxicity, inhalation Category 4

Environmental Hazards: Hazardous to aquatic environment/acute hazard Category 2

Hazardous to aquatic environment/long-term hazard Category 3

OSHA Defined Hazards: Not Established

Label Elements:



(Not DOT corrosive due to % threshold and no Cat. 1 skin corrosion)

Signal Word: DANGER

Hazard Statement: Causes skin irritation and serious eye damage. Harmful if inhaled. Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Precautionary Statements (Prevention): Wash thoroughly after handling. Avoid breathing mist/spray/vapors. Use only outdoors or in a well-ventilated area. Do not eat, drink or smoke when handling this product. Avoid release to the environment. Wear protective gloves/protective eyewear/face protection.

Precautionary Statements (Response): If swallowed: call a poison center/doctor if you feel unwell. Rinse mouth. If on skin: Wash skin with plenty of water. If skin irritation occurs: wash with plenty of water. Get medical attention/advice. Take off contaminated clothing and wash it before reuse. If in eyes: Rinse cautiously with water for several

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minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. Immediately call a poison control center/physician. If Inhaled: remove person to fresh air and keep comfortable for breathing. Call a poison control center/doctor if you feel unwell. Specific treatment: Rinse mouth.

Precautionary Statements (Storage): Store in original container, in upright position, tightly closed.

Precautionary Statements (Disposal): Follow local/regional/national/international regulations.

Hazards Not Otherwise Classified: None known.

Section 3. Composition/Information on Ingredients

Name of Hazardous Ingredients:CAS Number% by WeightNonylphenol polyethylene glycol ether127087-87-01-5

Due to Trade Secret, the exact percentage of composition has been stated as a range. The exact identities of other ingredients has also been withheld as Trade Secret. However, they do not contribute to the identified hazards of the product and will be divulged to proper authorities in an emergency.

Section 4. First Aid Measures

Eye Contact: Rinse cautiously with water for several minutes, holding eye open. Get immediate medical attention. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: get medical advice/attention.

Skin Contact: Wash with plenty of water. If skin irritation occurs: get medical advice/attention. Take off contaminated clothing and wash it before reuse.

Inhalation: Move to fresh air. Keep in a position comfortable for breathing. Call a physician if symptoms develop or persist.

Ingestion: If swallowed: DO NOT induce vomiting. Rinse mouth with water and drink plenty of water. Immediately call a poison control center/physician.

Most Important Symptoms/Effects, Acute & Delayed: Eye itching, stinging, redness, tearing. Skin redness, itching.

Indication of Immediate Medical Attention & Special Treatment Needed: Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

Section 5. Fire Fighting Measures

Suitable Extinguishing Media: Water fog. Dry chemical powder. Carbon dioxide.

Specific Hazards Arising From the Chemical: During fire, gases hazardous to health may be formed.

Special Protective Equipment and Precautions for Firefighters: Self contained breathing apparatus and full protective clothing.

Fire Fighting Equipment/Instructions: Move containers from area if you can do so without risk.

Specific Methods: Use standard firefighting procedures and consider the hazards of other involved materials.

General Fire Hazards: No unusual fire or explosion hazards noted.

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Section 6. Accidental Release Measures

Personal Precautions, Protective Equipment & Emergency Procedures: Keep unnecessary personnel away. Keep people away from and upwind of spill. Keep out of low areas. Wear appropriate protective equipment and clothing during clean up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

Methods & Materials for Containment & Cleaning Up: This product is miscible in water. Large spills: stop the flow of material, if this is without risk. Dike the spilled material, where possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. Small spills: wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spilled material to original container.

Environmental Precautions: Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

Section 7. Handling and Storage

Precautions for Safe Handling: Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid releases to the environment. Observe good industrial hygiene practices.

Conditions for Safe Storage, including any Incompatibilities: Store in original tightly closed container. Store away from incompatible materials (see sec. 10).

Section 8. Exposure Controls/Personal Protection

Occupational Exposure Guidelines: No exposure limits noted for ingredients.

<u>Appropriate Engineering Controls:</u> Good general ventilation (generally 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product. It is recommended that users of this product perform a risk assessment to determine the appropriate PPE.

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<u>Individual Protection Measures, Personal Protective Equipment:</u>

Eye/Face: Wear eye protection and face protection.

Skin/Body: Wear chemical resistant gloves.

Respiratory: No special protective equipment is needed under normal use conditions.

General Hygiene Considerations: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothes and protective equipment to remove contaminants.

Section 9. Physical & Chemical Properties

Appearance: Clear

Physical State: Liquid Color: Green, various pH: 9.0-9.5 Odor: Sweet, various

Boiling Point: Unknown Odor Threshold: Not available

Vapor Pressure: Unknown Specific Gravity: .998
Melting Point/Freeze Point: Unknown Flash Point: >200 F.

Melting Point/Freeze Point: Unknown Flash Point: >200 F.

Evaporation Rate: Not available Flammability (solid, gas): Non-flammable

Upper Flammability Limit: Not available Lower Flammability Limit: Not available

Explosive Properties: Not availableVapor Density: Not available

Water Solubility: Soluble Auto-Ignition Temperature: Not available

Decomposition Temperature: Not available Viscosity: Water-like

Oxidizing Properties: Not available

Other Solubilities: Not available

Section 10. Stability & Reactivity

Reactivity: May react with oxidizing agents.

Chemical Stability: Stable under normal conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur.

Conditions to Avoid: Do not mix with other chemicals. Avoid contact with incompatible materials.

Incompatibility: Strong oxidizing agents, strong reducing agents, strong acids, strong bases.

Hazardous Polymerization: Will not occur.

Hazardous Decomposition Products: Irritating and/or noxious fumes and gases may be emitted upon decomposition. Oxides of sodium.

Section 11. Toxicological Information

INFORMATION ON LIKELY ROUTES OF EXPOSURE:

Inhalation: May cause irritation of the respiratory system. Prolonged inhalation may be harmful.

Ingestion: Causes respiratory tract irritation.

Skin Contact: May cause skin irritation.

Eye Contact: May cause serious eye irritation.

COMPONENT INFORMATION:

<u>Chemical Name</u>
<u>Oral LD50</u>

<u>Dermal LD50</u>

<u>Inhalation LC50</u>

Nonyl Phenol Polyethylene glycol ether

4854mg/kg

2534mg/kg

11mg/l 4 hr.

INFORMATION ON PHYSICAL, CHEMICAL, TOXICOLOGICAL EFFECTS:

Symptoms: May cause skin irritation. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision, blindness. May cause respiratory tract irritation if swallowed. Mild to moderately toxic if inhaled.

DELAYED & IMMEDIATE EFFECTS AS WELL AS CHRONIC EFFECTS FROM SHORT TERM EXPOSURE & LONG TERM EXPOSURE:

Carcinogenicity: Not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA

Respiratory Sensitization: Not available.

Skin Sensitization: Not expected to cause skin sensitization.

Germ Cell Mutagenicity: No data available to indicate product is mutagenic or genotoxic.

Reproductive Toxicity: Not expected to cause reproductive toxicity. (STPP NOAEL (rat) 141mg/kg bw/day)

Specific Target Organ Toxicity, Single exposure: Not classified Specific Target Organ Toxicity, repeated exposure: Not classified.

Aspiration Hazard: Not available.
Chronic Effects: None noted.

Section 12. Ecological Information

Ecotoxicity: Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

<u>Chemical</u> <u>Algae/Aquatic Plants</u> <u>Fish</u> <u>Microorganisms</u> <u>Crustacea</u>

Nonylphenol Polethylene Glycol Ether LC50 1.2-9.3mg/l N/A N/A

96 hr.

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Persistance & Degradability: No data available.

Bioaccumulation: No data available. Mobility in Soil: No data available.

Other adverse Effects: No other adverse effects expected.

Section 13. Disposal Considerations

Disposal Instructions: Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of in accordance with local/regional/national/international regulations. Hazardous waste Code: Waste code should be assigned by discussion between the user, the producer and the waste disposal company.

Waste from Residues/Unused Products: Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see Disposal Instructions).

Contaminated Packaging: Empty containers should be taken to an approved waste handling site for recycling or disposal. Since empty containers may contain product residue, follow all label warnings even after container is emptied.

Section 14. Transport Information

Regulatory Information	UN Number	Proper Shipping Name	Classes	PG*	Label
See shipping					
papers					

NOTE: DOT Classification applies to most package sizes. For specific container size classifications or for size exceptions, refer to the Bill Of Lading with your shipment.

PG*: Packing Group

Section 15. Regulatory Information

U.S. Federal Regulations:

OSHA Hazards: Toxic by inhalation, moderate skin irritant, moderate respiratory irritant, severe eye iritant.

SARA 313 toxic chemical notification and release reporting:

Not regulated.

CERCLA

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Clean Water Act (CWA) 307: NO Clean Water Act (CWA) 311: NO

Clean Air Act (CAA) 112 Regulated Toxic Substances: No products were found.

All Components of this product are listed or exempt from listing on TSCA Inventory.

TSCA 8(a) IUR: Not regulated.

United States Inventory (TSCA 8b): Not regulated.

US State Right to Know Regulations: Yes, Nonylphenol polyethylene glycol ether

State Regulations

California Prop 65: No products were found in sufficient amounts to require reporting.

Section 16. Other Information

NFPA: 2,0,0,B HMIS: 2,0,0,B

Issue Date: 9/10/15 Revision Date: N/A Revision Note: N/A

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of the suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution.

Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

*Note: Hazard Determination System (HDS) ratings are on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although these ratings are not required on SDS's under 29 CFR 1910.1200, the preparer may choose to provide them. HDS ratings are to be used with a fully implemented program to relay the meanings of this scale.