

## Material Safety Data Sheet

### 1. Identification

a) Product Name	<b>ACTIONZYME-FOUR ENZYME BLEND LIQ</b>
b) Synonyms:	None
c) Recommended Use:	Enzyme for Detergent industries
d) Uses advised against:	<b>None</b>
e) Data on Ingredients:	Protein

<b>Company Information</b>
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### 2. Hazards Identification

#### Classification

a) Skin Corrosion/irritation	Category 2
b) Serious Eye Damage/Eye Irritation	Category 2
c) Respiratory Sensitization	Category 1
d) Specific target organ toxicity (single exposure)	Category 3

## Label Elements

### Signal Word

Danger



### Precautionary Statements:

1. Avoid breathing dust/mist/vapor/spray.
2. Use only outdoors or in a well – ventilated area.
3. Wear respiratory protection.
4. Avoid contact with Skin, Eyes and Clothing.
5. Wear protective gloves and safety glasses with side – shields.
6. Ensure regular cleaning of equipment, work area and clothing.
7. Do not ingest.

### 3. Composition and Information on Ingredients

a) Product Name:	CATAZYME-DET LIQ
b) Product description:	Protein
c) Product Use:	Enzyme for detergent application
d) Active components	Amylase, Protease, Cellulase & Lipase enzyme
e) Hazardous component	None
f) Chemical Name:	Amylase, Protease, Cellulase & Lipase enzyme
g) CAS No.:	9000-90-2
h) E C No.:	3.2.1.0



#### **4. First Aid Measurement**

##### **Inhalation:**

In case of vapor inhaled, remove from contaminated area to fresh air. Report the situation. Seek medical attention if allergic response is exhibited.

##### **Eye contact:**

In Case of contact with eyes, flush eyes with low pressure water for at least 15 minutes. If irritation develops, seek medical attention.

##### **Skin Contact:**

In case of contact with skin, wash skin with soap and cold water. Remove contaminated clothing and wash.

##### **Ingestion:**

If swallowed, rinse mouth and throat thoroughly with tap water. Drink water.

#### **5. FIRE FIGHTING MEASURES**

##### **Suitable extinguishing media:**

Standard procedure for chemicals fires. Foam. Water.

##### **Non-suitable extinguishing media:**

None.

##### **Specific exposure hazards:**

None.

##### **Protective equipment:**

No special requirements.



## **6. ACCIDENTAL RELEASE MEASURES**

### **Personal precautions/ Emergency procedures:**

Use only with adequate ventilation/personal protection. Avoid breathing dust or spray mist. Avoid formation of dust and aerosols. (See section 8).

### **Containment methods:**

Prevent further leakage or spillage if safe to do so.

### **Cleanup procedures:**

Contain and remove spilled product by mechanical means or with a vacuum cleaner equipped with a high efficiency filter. Avoid formation of aerosol.

## **7. HANDLING AND STORAGE**

### **Safe handling:**

Never handle liquid without appropriate personal protective equipment in accordance with Section 8. Avoid splashing and high pressure washing. Ensure good ventilation of the room when handling.

### **Storage:**

Keep container tightly closed in a cool, dry, well-ventilated place.

## **8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

### **Appropriate engineering controls:**

Adequate ventilation.

### **Eye/Face protection:**

Wear protective glasses or eye shield.



**Skin protection:**

Impermeable gloves recommended.

**Respiratory protection:**

Use NIOSH approved respiratory protection such as full-face mask.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance	Brown Liquid.
Odor:	Characteristic enzyme odor.
Odor Threshold	Not available
Ph	Not available
Melting point/freezing point	Not available
Initial boiling point and boiling range	Not available
Flash point	Not available
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Upper/ lower flammability or explosive limits	Not available
Vapor Pressure	Not available
Vapor Density	Not available
Relative Density	Not available
Solubility	Miscible
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available

**10. STABILITY AND REACTIVITY**

**Reactivity:**

Not available.



**Chemical stability:**

Stable under normal storage conditions.

**Hazardous to reactions:**

Not available.

**Conditions to avoid:**

Not available.

**Incompatible materials:**

Not available.

**Hazardous decomposition products:**

Not available.

**11. TOXICOLOGICAL INFORMATION**

**Routes of exposure:**

Eye contact, skin contact, ingestion, vapor inhalation.

**Symptoms:**

**Immediate:**

Can cause irritation to the eyes, skin, mucus membranes, and the upper respiratory tract.

**Delayed:**



Vapor inhalation exposure may lead to allergic sensitization based on exposure level, duration, and susceptibility.

Acute toxicity: Not available.

Eye irritation: May cause minor irritation.

Skin irritation: May cause minor irritation.

Respiratory irritation: May cause minor irritation.

**Sensitization towards product:**

Inhalation of vapor may cause allergic respiratory reactions, including asthma, in susceptible individuals on repeated exposure.

Germ cell mutagenicity: Not available

Reproductive toxicity: Not expected to produce reproductive toxicity

Carcinogenicity: Not classified as a carcinogen by IARC, OSHA, or NTP

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** Not available.

**Persistence and degradability:** Product is readily Biodegradable.

**Bio accumulative potential:** Not available.

**Mobility in soil:** Not available.

**Other adverse effects:** Not available.

## 13. DISPOSAL CONSIDERATIONS

No Special disposal method required, except that in accordance to all application federal, state, and local regulations.



#### 14. TRANSPORT INFORMATION

**UN Number:** Not Classified.

**UN Proper Shipping Name:** Not Classified.

**Transportation Hazard Class:** Not Classified.

**Packing Group:** Not classified.

**Transport Environmental Hazard:** Not classified.

**Transport Special Precautions:** Not Classified.

**MARPOL:** Not classified.

#### 15. REGULATORY INFORMATION

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

#### 16. OTHER INFORMATION

<b>Prepared by</b>	MCES
<b>Creation Date</b>	01/04/2022
<b>Revision Date</b>	31/03/2027

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