



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

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|----------------------------|---|
| Material name | BIO-ZYME |
| Product number | 201022 |
| Revision date | 01-Apr-2008 |
| Company information | Brulin & Company, Inc. P.O. Box 270 Indianapolis, IN 46206 US www.Brulin.com |
| Emergency | CHEMTREC 1-800-424-9300 |
| General information | Phone: 317-923-3211 Fax: 317-925-4596 |

2. Hazards Identification

| | |
|--|---|
| Emergency overview | Health injuries are not known or expected under normal use. No hazards resulting from the material as supplied. This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. |
| Potential short term health effects | |
| Eyes | Contact with eyes may cause irritation. |
| Skin | Health injuries are not known or expected under normal use. Prolonged and/or repeated skin contact may result in mild irritation or redness. |
| Inhalation | Health injuries are not known or expected under normal use. |
| Ingestion | Do not ingest. Harmful if swallowed. |
| Potential environmental effects | This material is not expected to be harmful to aquatic life. |

3. Composition / Information on Ingredients

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|-----------------------------|---|
| Composition comments | No dangerous ingredients according to Directive 2001/58/EC The manufacturer lists no ingredients as hazardous according to OSHA 29 CFR 1910.1200. |
|-----------------------------|---|

4. First Aid Measures

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|-----------------------------|---|
| First aid procedures | |
| Eye contact | Flush eyes with water as a precaution. Get medical attention if irritation develops or persists. |
| Skin contact | Wash off with soap and water. Get medical attention if irritation develops or persists. |
| Inhalation | Call a physician if symptoms develop or persist. |
| Ingestion | Have victim rinse mouth thoroughly with water. If ingestion of a large amount does occur, seek medical attention. |
| General advice | If you feel unwell, seek medical advice (show the label where possible). |

5. Fire Fighting Measures

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| Extinguishing media | |
| Suitable extinguishing media | Small Fires: Dry chemical, CO2, water spray or regular foam. Large Fires: Water spray, fog or regular foam. |

6. Accidental Release Measures

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| Environmental precautions | Prevent further leakage or spillage if safe to do so. |
| Methods for containment | Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. |

BIO-ZYME

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Methods for cleaning up

Never return spills in original containers for re-use.

Large Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Dike far ahead of liquid spill for later disposal.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean contaminated surface thoroughly.

7. Handling and Storage

Handling

Handle and open container with care.

Storage

Store in cool place. Keep in a well-ventilated place. Use care in handling/storage. Keep from freezing. Keep at temperatures between 4 and 49°C.

8. Exposure Controls / Personal Protection

Personal protective equipment

Eye / face protection

Avoid contact with eyes. Goggles.

Skin protection

Not normally needed. Wear impervious gloves for prolonged contact.

Respiratory protection

No personal respiratory protective equipment normally required.

General hygiene considerations

When using do not smoke. Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink.

9. Physical & Chemical Properties

Appearance

milky opaque

Color

White to off-white

Form

Liquid.

Odor

light citrus

Odor threshold

Not available

pH

8.65

Freezing point

Not available

Boiling point

100 °C estimated

Flash point

> 212 °F Pensky-Martens Closed Cup

Flammability limits in air, lower, % by volume

Not available

Flammability limits in air, upper, % by volume

Not available

Vapor pressure

Not available

Vapor density

Not available

Specific gravity

1.006

Solubility (H₂O)

100 %

VOC (Weight %)

0.1 % estimated

Viscosity

water thin

10. Chemical Stability & Reactivity Information

Chemical stability

Stable at normal conditions.

Conditions to avoid

Direct sources of heat. Do not freeze.

Incompatible materials

None known.

Hazardous decomposition products

Carbon monoxide and carbon dioxide.

Possibility of hazardous reactions

Will not occur.

11. Toxicological Information

Further information

This product has no known adverse effect on human health.

12. Ecological Information

Ecotoxicity Components of this product have been identified as having potential environmental concerns. This material is not expected to be harmful to aquatic life.

13. Disposal Considerations

Disposal instructions Dispose in accordance with all applicable regulations. This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste.

14. Transport Information

Department of Transportation (DOT) Requirements

Not regulated as dangerous goods.

Department of Transportation (DOT) Requirements NON-BULK

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

15. Regulatory Information

US federal regulations This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical No

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical No

International regulations The product does not need to be labelled in accordance with EC directives or respective national laws.

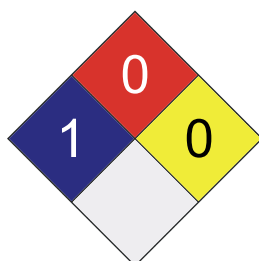
State regulations This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

16. Other Information

HMIS rating

| | |
|---------------------|-----|
| Health | / 1 |
| Flammability | 0 |
| Physical Hazard | 0 |
| Personal Protection | B |

NFPA codes



Prepared date

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Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release.