



MATERIAL SAFETY DATA SHEET

PUNATURE FOOD INGREDIENTS CO., LTD
Room 202, No. 15, Lane 978 Jindu Road, 201108 Shanghai, China
Tel: +86 (0)21 5433 7075
Fax: +86 (0)21 3466 7039
Email: sales@punature-ingredients.com

LACTASE

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

| | |
|------------------|------------------------------------|
| Products Name | LACTASE |
| CAS No | 9031-11-2/56-81-5 |
| Manufacturer | PUNATURE FOOD INGREDIENTS CO., LTD |
| Telephone Number | +86-(0)21-54337075 |
| Fax Number | +86 (0)21 34667079 |

SECTION 2: HAZARD IDENTIFICATION

Potential health effects(ACUTE & CHRONIC):

| | |
|--------------|---|
| Eyes Contact | May cause irritation and sensitization in susceptible individuals following direct contact |
| Skin Contact | May cause irritation in susceptible individuals following prolonged direct contact |
| Ingestion | To the best of our knowledge, data are lacking to provide evidence that amounts ingested incidental to processing could result in significant adverse health effects. |
| Inhalation | / |

Physical & Chemical Hazards: None

Environment Hazards: None

Specific Hazards: None

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

| | | |
|----------|------------------|------------------------|
| Lactase | CAS No.9031-11-2 | % By Weight: 50% - 55% |
| Glycerol | CAS No.56-81-5 | % By Weight: 45% - 50% |

SECTION 4: FIRST AID MEASURE

Remove from exposure; seek medical attention if allergic response is exhibited.
For skin contact, wash with water. For eye contact, flush with water.
Consult your physician if adverse health effects persist.



SECTION 5: FIREFIGHTING PROCEDURES

| | |
|------------------------------|----------------|
| Suitable extinguisher media: | Non-flammable. |
| None suitable media | None |
| Special protective equipment | None |
| Additional information | None |

SECTION 6: ACCIDENTAL RELEASE MEASURES

Not harmful. No special measures required.

SECTION 7: HANDLING AND STROAGE

| | |
|------------------------|---|
| Name | Free flowing material |
| Suitable storage media | Fibre/HDPE drums with poly liner |
| Storage | Store in dry, cool and well-ventilated places away from the sun, heat, etc. |
| Recommendations | Avoid high temperature humidity and long storage time, keep container closed. |

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

| | |
|------------------------|-----------------------------------|
| Respiratory protection | Special measures are not required |
| Hand protection | Special measures are not required |
| Eye protection | Special measures are not required |
| Skin protection | Special measures are not required |
| Protective measures | Special measures are not required |

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|------------------|---------------------|----------------------------------|----------------------|
| Boiling point | N/A | Specific gravity (H2O=1) | N/A |
| Melting point | N/A | Vapor density (AIR=1) | N/A |
| Water solubility | Soluble | Vapor pressure (mm Hg) | N/A |
| Odour and taste | Characteristic | Evaporation rate (Butyl Acetate) | N/A |
| Physical state | free flowing powder | Color | white to light brown |

SECTION 10: STABILITY AND REACTIVITY

| | |
|----------------------------------|---|
| Stability | Stable product at normal conditions of pressure and temperature. No dangerous reactions are expected. |
| Conditions to avoid | High temperature, humidity |
| Materials to avoid | Iron, copper |
| Hazardous decomposition products | none |



SECTION 11: TOXICOLOGICAL INFORMATION

NON-TOXIC

SECTION 12: ECOLOGICAL INFORMATION

This product is 100% biodegradable. It is not known to be adverse to the environment.

SECTION 13: DISPOSABLE CONSIDATIONS

No special disposal considerations are required, beyond compliance with local authorities and regulations.

SECTION 14: TRANSPORTATION INFORMATION

When transporting, keep in cool dry place. Exposure to liquid may cause increase in bacteria count. Exposure to high temperatures may result in loss of product.

SECTION 15: regulatory information

SECTION 16: OTHER INFORMATION

NONE

DISCLAIMER OF LIABILITY:

The information contained herein is based on data available to us and is believed to be true and accurate. However, no warranty is expressed or implied regarding the accuracy of this data as conditions of use and storage are beyond our control. The contents of this document are subject to change without notice.