



# LEB-H MATERIAL SAFETY DATA SHEET

Rantec Corporation, Highway 14, Ranchester, WY 82839

## PRODUCT NAME: LEB-H

### SECTION 1. PRODUCT IDENTIFICATION & EMERGENCY INFORMATION

TRADE NAME: LEB-H  
 CHEMICAL NAME: endo-1,4-R-D-mannase  
 CHEMICAL FAMILY: Enzyme  
 D.O.T. EMERGENCY PHONE: 1-307-655-9565  
 ISSUE DATE: 8 June 2010

### SECTION 2. HAZARDOUS INGREDIENTS

CAS NO.	COMPONENT	% RANGE	ACGIH TLV	OSHA PEL
7647-14-5	Sodium Chloride	14-15	none	none

### SECTION 3. PHYSICAL & CHEMICAL PROPERTIES

SPECIFIC GRAVITY: 1.090-1.110	pH: 7.0 - 7.5
DENSITY: approx. 9.23 LB/GAL	FORM: Liquid
BOILING POINT: 220 F	COLOR: Light Brown
FREEZING/MELTING POINT: approx. 14 OF	ODOR: Fermentation
SOLUBILITY IN WATER: Complete	VAPOR PRESSURE. (mm Hg @ F): ND
PERCENT VOLATILES: None	

### SECTION 4. FIRE & EXPLOSION HAZARD

FLASH POINT: None  
 FLAMMABLE LIMITS: LEL:NA UEL:NA  
 EXTINGUISHING MEDIA: This product is non-combustible.  
 FIRE FIGHTING: None  
 UNUSUAL FIRE HAZARD: None known.

### SECTION 5. HAZARD RATING SYSTEM

	HMS	NFPA 704	KEY
HEALTH	0	0	4 = Severe
FLAMMABILITY	0	0	3 = Serious
REACTIVITY	0	0	2 = Moderate
			1 = Slight
			0 = Minimal

### SECTION 6. HEALTH INFORMATION

PRIMARY ROUTE(S) OF ENTRY: Eyes, skin and ingestion.  
 CARCINOGEN: Not listed in NTP, IARC monographs or OSHA regulated.  
 THRESHOLD LIMIT VALUE: Not established for the product.

#### EFFECTS OF EXPOSURE

EYE CONTACT: May cause eye irritation upon direct contact depending on individual sensitivity.  
SKIN CONTACT: May produce a drying effect which can cause irritation on prolonged or repeated exposure.  
INHALATION: Not expected to pose an inhalation hazard under conditions of normal use.  
INGESTION: Ingestion of large quantities may cause vomiting, diarrhea, and prostration.

#### FIRST AID

EYES: Immediately flush with copious amounts of water for at least 15 minutes while holding eyelids open. If irritation persists, get medical attention.  
SKIN: Wash with soap and water. Remove contaminated clothing and launder before reuse. If irritation persists, get medical attention.  
INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.  
INGESTION: If victim is conscious, give large quantities of water to dilute. DO NOT induce vomiting. If vomiting occurs spontaneously, keep the victim's head below hips while vomiting. Never give anything by mouth to an unconscious person. Get immediate medical attention.

#### TOXICITY

ACUTE: ND

CHRONIC: ND

**SECTION 7. PERSONAL PROTECTION**

HANDS: Wear rubber or neoprene gloves.

EYES: Chemical splash goggles.

RESPIRATORY: None generally required under conditions of normal use.

VENTILATION: None normally required.

OTHER: Emergency eye wash fountains and safety showers should be in the immediate vicinity of any potential exposure. Remove contaminated clothing and laundry before reuse.

**SECTION 8. REACTIVITY DATA**

STABILITY: Stable

CONDITIONS TO AVOID: None known.

HAZARDOUS POLYMERIZATION: **Will** not occur.

DECOMPOSITION PRODUCTS: NA

INCOMPATIBILITY: None known.

**SECTION 9. SPILL CONTROL PROCEDURE**

SMALL SPILLS: Stop the flow of material. Surround spill to prevent spreading. Absorb with an inert absorbent or pump to salvage vessels. Flush spill area with water. Do not allow material to dry on floor or other surfaces as dust may be irritating.

LARGE SPILLS: Same procedures as above.

DISPOSAL: Dispose of in accordance with all applicable local, state and federal regulations.

**SECTION 10. SPECIAL PRECAUTIONS**

HANDLING & STORAGE: Store in a cool location from 35 - 77 OF. Do not get in eyes, on skin or clothing. Wash thoroughly after handling. Remove contaminated clothing and laundry before reuse. Wear appropriate protective equipment.

PRECAUTIONARY LABEL INFORMATION: CAUTION! Do not get in eyes, on skin or clothing. May cause eye and skin irritation.

**SECTION II. REGULATORY INFORMATION**

DEPARTMENT OF TRANSPORTATION

D.O.T. SHIPPING NAME: ESA-15, Not Regulated

D.O.T. HAZARD CLASS: None.

UN NUMBER: NA

NA NUMBER: NA

TSCA

All components of this product are listed on the TSCA Inventory.

CERCLA

REPORTABLE QUANTITY (RQ): NA

If the reportable quantity of this product is accidentally spilled, the incident is subject to the provisions of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and must be reported to the National Response Center by calling (800) 424-8802.

SARA TITLE III

Under the provisions of the Superfund Amendments and Reauthorization Act of 1986, Section 302-Extremely Hazardous Substances (40CFR355), this product does not contain ingredients listed in Appendix A and B.

Under Sections 311/312 of SARA, this product is classified into the following hazard categories:

- NO Immediate (acute) health hazard
- NO Delayed (chronic) health hazard
- NO Fire hazard
- NO Sudden Release of Pressure Hazard
- NO Reactive Hazard

This product contains the following Section 313 Reportable Quantities: None

NE = Not Established

NA = Not Applicable

ND = No Data Available

PREPARED BY: Todd Sanner