



Materials Safety Data Sheet

SECTION 1: PRODUCT AND COMPANY INFORMATION

Product Name: MnP, manganese peroxidase enzyme

Product Supplier: Infinite Enzymes
PO Box 2654
State University, AR 72467

Phone: (870) 926-9566
Fax: (870) 680-4348

SECTION 2: HAZARDS IDENTIFICATION

Emergency Overview May cause irritation to eyes or severe damage. May cause irritation to the skin and respiratory tract. May be harmful if absorbed through skin. May be harmful if inhaled. May be harmful if swallowed.

Potential Health Effects

Eyes: Causes eye irritation. Overexposure may cause severe corneal damage.

Skin: May be harmful if absorbed through skin. May cause skin irritation.

Inhalation: May be harmful if inhaled. May cause nose and throat irritation if inhaled as a vapor or mist. May cause respiratory tract irritation. Inhalation of a large amount may cause headache, dizziness, low blood pressure, loss of vision.

Ingestion: May be harmful if swallowed. May cause oral and gastrointestinal irritation. Ingestion of large amount may cause local tissue damage, nausea, vomiting, diarrhea, bleeding, low blood pressure, loss of vision.

SECTION 3: COMPOSITION/INGREDIENT INFORMATION

Ingredient, CAS Number	Approximate % by weight	ACGIH	OSHA
Manganese peroxidase, 114995-15-2	33	Not listed	Not listed
Sodium tartrate	33	Not listed	Not listed
Other inert ingredients	33	NA	NA*

*Not applicable

SECTION 4: FIRST AID MEASURES

In case of skin contact: Wash with plenty of water.

In case of eye contact: Rinse thoroughly with water for at least 15 minutes and consult a physician.

If inhaled: If breathed in, move person to fresh air. Seek medical attention if breathing becomes difficult or if cough develops. If not breathing, give artificial respiration.

If ingested: Rinse mouth with water and contact a physician or poison control center for instructions.

SECTION 5: FIRE FIGHTING MEASURES

Conditions of flammability: Not flammable or combustible as packaged.

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for firefighters: Wear self-contained breathing apparatus for fire-fighting if necessary.

Hazardous combustion products: Nature of decomposition products not known.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions: Use personal protective equipment. Avoid breathing vapors, mist or gas.

Environmental precautions: None.

Methods and materials for containment and cleaning up: Use a suitable closed container.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling: Avoid contact with skin, eyes and mouth.

Recommended storage at 2-8 °C.

SECTION 8: EXPOSURE CONTROLS/ PPE

Engineering Controls

Respiratory protection: Work under adequate ventilation.

Personal Protective equipment

Respiratory protection: Respiratory protection is not required unless exposure to acid, base or hazardous substrate is anticipated. If a respirator is deemed appropriate, use a full-face respirator with combination or type ABEK respirator cartridge. Make sure respirator has been fitted properly before use.

Hand protection: Use gloves that have been inspected prior to use. Use proper glove removal technique to avoid skin contact with product. Dispose of contaminated gloves after use in accordance with applicable laws. Wash hands after use.

Eye protection: Approved safety glasses with side-shields should be used.

Skin and body protection: The use of a lab coat or impervious clothing is recommended.

Hygiene: Use good industrial hygiene and safety practices. Wash hands after use.

SECTION 9: PHYSICAL/CHEMICAL PROPERTIES

Appearance: Tan powder

Color: Tan to light yellow

Odor: Odorless

pH: 4 – 5

Melting point/freezing point: No data
 Boiling point: No data
 Flash point: No data
 Specific gravity: No data
 Vapor pressure: No data

SECTION 10: STABILITY AND REACTIVITY

Product is stable under recommended storage conditions.
 Avoid mixing with acids and oxidizing agents.
 Nature of decomposition products is not known.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute toxicity

Oral LD50: No data available
 Inhalation LD50: No data available
 Dermal LD50: No data available

Chronic toxicity

Carcinogenicity

IARC: No component of this product has been identified as a carcinogen by IARC.
NTP: No component of this product has been identified as a carcinogen by NTP.
OSHA: No component of this product has been identified as a carcinogen by OSHA.

Mutagenicity No data available

Teratogenicity No data available

Reproductive toxicity No data available

SECTION 12: ECOLOGICAL INFORMATION

Product not tested.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal Method: Dispose of in accordance with federal, state and local laws. Contains solid sodium tartrate.

Waste Classification: unknown

SECTION 14: TRANSPORT INFORMATION

DOT (US) Not dangerous

IMDG Not dangerous

IATA Not dangerous

SECTION 15: REGULATORY INFORMATION

OSHA Hazards: Target organ effect: skin and respiratory sensitizer, irritant.

SARA 302 Components: none

SARA 313 Components: none

SARA 304 Components: none

SARA 311/312 Hazards: None

Massachusetts Right to Know Components: none

Pennsylvania Right to Know Components: none

New Jersey Right to Know Components: none

California Prop. 65 Components: This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm

SECTION 16: OTHER INFORMATION

Further information

This MSDS was prepared according to the best of our knowledge and does not represent a guarantee of the properties of the product. Always use good laboratory practices and chemical hygiene.

Prepared December 2015.