

Material Safety Data Sheet MANNOZYM

Issued 12/06/2003
 Rev. n. 1 01/01/2012

Printed on 01/01/2013

This MSDS cancels and replaces any other previous edition.

Safety Data Sheet according to Regulation (EC) nr. 1907/2006 dated 18 December 2006 as carried out by the Law dated 6 April 2007, nr.46

1 PRODUCT AND COMPANY IDENTIFICATION

1.1 Commercial name: MANNOZYM
1.2 Type of product and use: Enzyme preparation for oenological and professional use
1.3 Details of the supplier : ENOLOGICA VASON SpA – Via Nassar 37
 37029 SAN PIETRO IN CARIANO (VR) ITALIA
 Phone n. +39-045-6859017 Fax n. +39-045-7725188

E-mail: info@vason.com

Emergency phone number of the company: +39 045-6859017

2. HAZARDS IDENTIFICATION

2.1 The preparation is classified as dangerous according to Directive 1999/45/EC and its amendments.

- Properties /Symbols

Xn



Harmful

2.2 Lable elements



R Phrases : R42 May cause sensibilization by inhalation and skin contact

S Phrases : S22/23 Do not breathe gas/fumes/vapour/spray

S24 Avoid contact with skin

S36/37 Wear suitable gloves and garments

Contents :

PECTINASE

Hazard indication for human and environmental:

Human health hazards:

May cause sensitisation by inhalation.

Dust may cause mechanical irritation.

Environmental hazards:

Based on the available data of this product no hazardous properties are known.

Physical/chemical hazards:

Possibility of explosion exists under dusty conditions.

3. COMPOSITION – INFORMATION ON INGREDIENTS

3.1 Substances

N.A.

3.2 Mixtures

Hazardous components within the meaning of EEC directive 67/548 and CLP regulation and corresponding classification

1-10% PECTINASE

Material Safety Data Sheet MANNOZYM

CAS 9032-75-1 EC 232-885-6

Xn; R42



4. FIRST AID MEASURES

4.1 Effects and symptoms

Contact with the skin:

There is no known acute effect after over-exposure to this product.

Contact with the eyes:

May cause eye irritation. (redness).

Ingestion:

There is no known acute effect after over exposure to this product

Inhalation:

Over-exposure by inhalation may cause respiratory irritation. (coughing) May cause sensitisation by inhalation.

4.2 First-aid measures

General:

Protection of first-aiders: put on appropriate personal protective equipment (see section 8). Move exposed person to fresh air. Remove contaminated clothing and shoes

Inhalation:

Remove to fresh air. Prevent cooling of the person. Keep victim at rest in half-upright position. If not breathing, give artificial respiration. Get medical attention.

Ingestion:

If swallowed, rinse mouth with water (only if person is conscious). Obtain medical attention if symptoms occur.

Contact with the skin:

Rinse with plenty of running water. Remove contaminated clothing and shoes. Obtain medical attention if symptoms occur.

Contact with the eyes:

Rinse with plenty of running water. Obtain medical attention if symptoms occur.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing methods:

Use dry chemical or Carbon dioxide (CO₂). If large fire use extinguishing media suitable for surrounding materials.

5.2 Hazardous thermal decomposition products

In case of fire, may produce toxic and/or corrosive decomposition products.

5.3 Special fire-fighting procedures

Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions

Avoid creating dusty conditions and prevent wind dispersal. Avoid contact with eyes, skin and clothing. Self-contained breathing apparatus. Use suitable protective equipment (section 8). Consult expert immediately. Keep away from sources of ignition. Take precautionary measures against static discharges. Use explosion-proof electrical (ventilating, lighting and material handling) equipment.

6.2 Environmental precautions

Do not allow to enter into soil/subsoil or into surface water or drains

Material Safety Data Sheet MANNOZYM



6.3 Clean-up Methods

Small spill and leak: Vacuum or sweep up material and place in a designated, labelled waste container. Clean up affected area with a large amount of water.

Large spill and leak: Prevent entry into sewers, basements or confined areas. Dyke if necessary. Vacuum or sweep up material and place in a designated, labelled waste container. Recycle, if possible. Prevent formation of dust clouds. Use explosion-proof electrical (ventilating, lighting and material handling) equipment.

6.4 Reference to other section

See also section 8 and 13

7. HANDLING AND STORAGE

7.1 Precaution for safe handling:

Preferably use in closed systems. Use with adequate ventilation. Use suitable protective equipment. Avoid contact with eyes, skin, respiratory tract and clothing. Avoid creating dusty conditions and prevent wind dispersal. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Take measures against static discharge. Keep away from sources of ignition.

7.2 Condition of safe storage:

Keep in a cool and dry place ; adequately ventilated premises ; keep away from food , drink and feed.

8. EXPOSURE CONTROLS & PERSONAL PROTECTION

8.1 Control Parameters

PECTINASE – Index : NA, CAS :9032-75-, EC No : 232-885-6

Engineering measures

Use only with adequate ventilation. Local exhaust ventilation should be provided. Use explosion proof electrical (ventilating, lighting and material handling) equipment.

Personal protection

General norms on personal protection and safety in the workplace:

Keep away from food, drink, and animal feeding stuffs.

Remove contaminated clothing.

Wash hands before break time or at the end of work.

Avoid contact with eyes and skin.

Respiratory protection:

Dust protection mask P3

Hand protection:

CE-approved latex gloves specific for the chemical industry.

Eye protection:

Splash goggles. Do not use contact lenses.

Body protection:

Protective apron, boots

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties:

| | |
|--------------------------------|----------------|
| - Appearance: | Liquid |
| - Colour: | Brown liquid |
| - Odour: | characteristic |
| - Melting point/range: | not applicable |
| - Boiling point/boiling range: | not applicable |
| - Flash point: | not applicable |

Material Safety Data Sheet MANNOZYM

| | |
|------------------------------|---------------------------------|
| - Evaporation rate: | not applicable |
| - Flammability: | not applicable |
| - Vapour pressure: | not applicable |
| - Vapour density: | not applicable |
| - Relative density: | not applicable |
| - Water solubility at 20° | complete |
| - Partition coefficient: | n-octanol/water: not applicable |
| - Autoignition temperature: | not applicable |
| - Decomposition temperature: | not applicable. |
| - Viscosity, dynamic: | not applicable |
| - Explosivity: | not applicable |
| - Oxidizing properties: | not applicable |

10. STABILITY AND REACTIVITY DATA

10.1 Stability:

Stable under recommended storage and handling conditions (see section 7)

10.2 Conditions to avoid:

No special recommendations

10.3 Substances to avoid:

No special recommendations

11. TOXICOLOGICAL INFORMATION

11.1 Potential acute health effects

Inhalation: may cause sensitisation by inhalation

Ingestion: no known significant effects or critical hazards

Skin contact: no known significant effects or critical hazards

Eye contact: no known significant effects or critical hazards

11.2 Potential chronic health effects:

Chronic effects: Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity: no known significant effects or critical hazards

Mutagenicity: no known significant effects or critical hazards

Developmental effects: no known significant effects or critical hazards

12. ECOLOGICAL INFORMATION

12.1 Environmental effects:

No known significant effects or critical hazards

12.2 Aquatic eco-toxicity:

No specific data

12.3 Persistence / degradability:

No specific data

12.4 Other adverse effects:

No known significant effects or critical hazards.

12.5 Mobility:

For data on physical state and solubility see section 9.

12.6 Remarks:

The preparation is believed not to be dangerous to the environment with respect to mobility, persistence and degradability, bio-accumulative potential, aquatic toxicity and other data relating to eco-toxicity.

13. DISPOSAL CONSIDERATIONS

Product and packages:

Material Safety Data Sheet MANNOZYM

Waste must be disposed of in accordance with applicable norms, through authorized disposal entities.

14. TRASPORT INFORMATION

| | |
|-------------|---|
| 14.1 | UN number Not classified as dangerous in the meaning of transport regulations |
| 14.2 | UN proper shipping name N.A. |
| 14.3 | Transport hazard class (es) N.A. |
| 14.4 | Packing Group N.A. |
| 14.5 | Environmental hazards N.A. |
| 14.6 | Special precautions for user N.A. |

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislations specific for the substance or mixture

Dir.67/548/EEC (Classification, packaging and labelling of dangerous substances) Dir.99/45/EEC (Classification, packaging and labelling of dangerous preparations). Dir. 98/24/EEC (Risks related to chemical agent at work). Dir. 2000/39/EC (Occupational exposure limit values). Dir. 2006/8/EEC. Regulation (EC) n.1907/2006 (REACH), Regulation (CE) n.1272/2008 (CLP), Regulation (CE) n.790/2009, Regulation (CE) n.453/2010

Where applicable, refer tyo the following regulatory provisions:

Directive 82/501/EEC

Regulation (CE) n.648/2004 (detergents)

Directive 1999/13/EEC (VOC)

16. OTHER INFORMATION

Full text of phrases referred to in Section 3

R42 May cause sensitization by inhalation and skin contact

The information contained is based on our knowledge of the product, at the date of publishing and it is given quite sincerely. Users are advised of possible additional hazards when the product is used in applications for which it was not intended. This sheet shall only be used and reproduced for prevention and security purposes. The references to legislative, regulatory and codes of practice documents cannot be considered as exhaustive. It is the responsibility of the person receiving the product to refer to the totality of the official documents concerning the use, and the handling of the product. It is also the responsibility of the handlers of the product to pass on to any subsequent persons who will come into contact with the product (usage, storage, cleaning of containers, other processes) the totality of the information contained within this safety data sheet and necessary for safety at work, the protection of health and the protection of environment.

Enologica Vason arranges training meetings focused on knowledge and use of its products.

The data contained are based on the current level of our knowledge at the date of issue and/or revision. They are referred only to the product indicated and do not represent a specification of quality guarantee.