

## Safety Data Sheet

### EnartisZym RS

Safety Data Sheet dated: 08/11/2022 - version 2

## 1. Identification

GHS Product identifier

Trade name: EnartisZym RS

### Recommended use of the chemical and restrictions on use

Recommended use: FOR PROFESSIONAL USE

FOR ENOLOGICAL USE

Uses advised against: no data available

### Supplier's details

Company:

ESSECO S.r.l. Via San Cassiano 99

28069 - Trebate (NO)

Italy

Enartis - Phone n. +39-0321-790300

Competent person responsible for the safety data sheet: vino@enartis.it

Importer's details

Australia - ENARTIS PACIFIC PTY

69 Chadstone Rd, Malvern East,

Victoria, 3145 Australia -

Ph. +61 (03) 9428 0037

New Zealand - ENARTIS PACIFIC PTY

39 Edmundson Street - Onekawa

Napier - New Zealand

Ph. +64 (06) 8434 413

### Emergency phone number

Australia: Ph. +61 (03) 9428 0037 New Zealand: Ph. +64 (06) 8434 413

Enartis - Phone n. +39-0321-790300

Australia Wide 24/7 Poison Information centre: 131126

New Zealand Emergencies National Poisons Centre: 0800 764 766

Other Emergencies: Dial 111 then ask for fire, ambulance or police as required

## 2. Hazard identification



Classification of the Hazardous chemical

Resp. Sens. 1 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Adverse physicochemical, human health and environmental effects:

No other hazards

GHS label elements, including precautionary statements

### Pictograms and Signal Words



Danger

### Hazard statements

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

### Precautionary statements

P261 Avoid breathing vapours.

P261 Avoid breathing spray.

P285 In case of inadequate ventilation wear respiratory protection.

P304+P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

Other hazards which do not result in a classification

Other Hazards: No other hazards

---

### 3. Composition/information on ingredients

#### Substances

no data available

#### Mixtures

Mixture identification: EnartisZym RS

#### Hazardous components within the meaning of the "Australian Work Health and Safety (WHS)" regulation and related classification:

Qty	Name	Ident. Numb.	Classification	Registration Number
≥ 5 - < 7 %	Glucanase, endo-1,3(4) β	CAS:62213-14-3 EC:263-462-4	Resp. Sens. 1, H334	
≥ 1 - < 3 %	Pectin lyase	CAS:9033-35-6 EC:232-894-5	Resp. Sens. 1, H334	
≥ 0.5 - < 1 %	Pectinesterase	CAS:9025-98-3 EC:232-807-0	Resp. Sens. 1, H334	
≥ 0.5 - < 1 %	Polygalacturonase	CAS:9032-75-1 EC:232-885-6	Resp. Sens. 1, H334	

---

### 4. First-aid measures

#### Description of necessary first-aid measures

In case of skin contact:

- Immediately take off all contaminated clothing.
- Remove contaminated clothing immediately and dispose off safely.
- In case of persistent skin irritation consult a doctor.

In case of eyes contact:

- Wash immediately with water.

In case of Ingestion:

- Induce vomiting. SEEK A MEDICAL EXAMINATION IMMEDIATELY and present the safety-data sheet.

In case of Inhalation:

- Remove casualty to fresh air and keep warm and at rest.

#### Symptoms caused by exposure

no data available

#### Medical attention and special treatment

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

---

### 5. Fire-fighting measures

#### Suitable extinguishing media

- Water.
- Carbon dioxide (CO<sub>2</sub>).

Extinguishing media which must not be used for safety reasons:

- None in particular.

Specific hazards arising from the chemical

- Do not inhale explosion and combustion gases.
- Hazardous combustion products: no data available
- Explosive properties: no data available
- Oxidizing properties: no data available

#### Special protective equipment and precautions for fire-fighters

- Use suitable breathing apparatus .
- Wear suitable protective clothing (helmet, protective clothings, goggles, fire resistant gloves, boots) and protect respiratory organs (self contained breathing apparatus).
- Move undamaged containers from immediate hazard area if it can be done safely.
- Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

#### HazChem Code/Emergency Action code

N.A.

Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.

---

### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.  
Remove persons to safety.  
See protective measures under point 7 and 8.

### **Environmental precautions**

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.  
Retain contaminated washing water and dispose it.  
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

### **Methods and material for containment and cleaning up**

Wash with plenty of water.  
Suitable material for taking up: absorbing material, organic, sand  
Dispose of the collected material in accordance with the current regulations.

---

## **7. Handling and storage**

### **Precautions for safe handling**

Don't use empty container before they have been cleaned.  
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.  
Contaminated clothing should be changed before entering eating areas.  
Do not eat or drink while working.  
See also section 8 for recommended protective equipment.

### **Conditions for safe storage, including any incompatibilities**

Keep away from food, drink.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

---

## **8. Exposure controls/personal protection**

### **Control parameters – exposure standards, biological monitoring**

No data available

### **Appropriate engineering controls**

no data available

### **Individual protection measures, such as personal protective equipment (PPE)**

Please see both sections 5 and 6 for information about personal protective equipment to be worn in an emergency (e.g.: fire or unintentional release of the substance).

Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

The final choice of protective equipment will depend upon a risk assessment.

Personal protective equipment selections vary based on potential exposure conditions and working conditions.

Eye protection:

Chemical risk goggles (with side protection).

Technical reference standard: UNI EN 166

Protection for skin:

Wear chemical resistant clothing.

Technical reference standard: UNI EN 13034

Wear chemical resistant safety shoes.

Technical reference standard: UNI EN 20345

Protection for hands:

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Glove suitability and breakthrough time will differ depending on the specific use conditions.

Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions.

Use protective gloves that provides comprehensive protection.

NBR (nitrile rubber) (Recommended thickness of the material: 0.4 mm; Permeation time: > 480 min)

UNI EN 420/UNI EN 374

Respiratory protection:

Depending on the potential for exposure, select respiratory protective equipment suitable for the specific conditions of use and in compliance with current legislation.

Half-face mask with combined filter

Mask with filter "P", white colour

Technical reference standard for filters to be used in the presence of gases and vapours: UNI EN 14387

Use respiratory protection where ventilation is insufficient or exposure is prolonged.

---

## 9. Physical and chemical properties

Physical State: Liquid  
Appearance Liquid  
Odour: None  
Odour threshold: no data available  
pH: 4.0 - 5.0 (20°C)  
Melting point / freezing point: no data available  
Initial boiling point and boiling range: no data available  
Flash point: no data available  
Evaporation rate: no data available  
Flammability (Solid, Gas) no data available  
Upper/lower flammability or explosive limits: no data available  
Vapour pressure: no data available  
Vapour density: no data available  
Relative density:  $\pm 1.21$  g/cm<sup>3</sup> (20°C)  
Solubility in water: 100%  
Solubility in oil: no data available  
Partition coefficient (n-octanol/water): no data available  
Auto-ignition temperature: no data available  
Decomposition temperature: no data available  
Viscosity: no data available  
Specific heat value: no data available  
Saturated vapour concentration: no data available  
Release of invisible flammable vapours and gases: no data available  
Particle size: no data available  
Particle size distribution: no data available  
Shape and aspect ratio: no data available  
Crystallinity: no data available  
Dustiness: no data available  
Specific surface area: no data available  
Degree of aggregation or agglomeration, and dispersibility: no data available  
Biodurability or biopersistence: no data available  
Surface coating or chemistry: no data available

---

## 10. Stability and reactivity

### Reactivity

Stable under normal conditions

### Chemical stability

no data available

### Possibility of hazardous reactions

### Conditions to avoid

Stable under normal conditions.

### Incompatible materials

Oxidants, alkalis, strong acids

### Hazardous decomposition products

None

---

## 11. Toxicological information

### Information on toxicological effects

### Toxicological Information of the Preparation

- |                                      |  |
|--------------------------------------|--|
| a) acute toxicity                    | Not classified<br>Based on available data, the classification criteria are not met |
| b) skin corrosion/irritation         | Not classified<br>Based on available data, the classification criteria are not met |
| c) serious eye damage/irritation     | Not classified<br>Based on available data, the classification criteria are not met |
| d) respiratory or skin sensitisation | The product is classified: Resp. Sens. 1(H334)                                     |

e) germ cell mutagenicity	Not classified Based on available data, the classification criteria are not met
f) carcinogenicity	Not classified Based on available data, the classification criteria are not met
g) reproductive toxicity	Not classified Based on available data, the classification criteria are not met
h) STOT-single exposure	Not classified Based on available data, the classification criteria are not met
i) STOT-repeated exposure	Not classified Based on available data, the classification criteria are not met
j) aspiration hazard	Not classified Based on available data, the classification criteria are not met

## 12. Ecological information

### Ecotoxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

### List of Eco-Toxicological properties of the product

Not classified for environmental hazards.

No data available for the product

### Persistence and degradability

no data available

### Bioaccumulative potential

no data available

### Mobility in soil

no data available

### Other adverse effects

no data available

## 13. Disposal considerations

### Disposal methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

## 14. Transport information

Not classified as dangerous in the meaning of transport regulations.

### UN number

no data available

### UN proper shipping name

no data available

### Transport hazard class(es)

no data available

### Packing group, if applicable

no data available

### Environmental hazards

no data available

### Special precautions for user

ADG-Subsidiary hazards no data available

ADG-S.P.: no data available

Road and Rail (ADR-RID):

no data available

Air (IATA):

no data available

Sea (IMDG):

no data available

### Additional Information

no data available

**HazChem Code/Emergency Action code**

no data available

---

## 15. Regulatory information

### Safety, health and environmental regulations specific for the product in question

This Safety Data Sheet has been prepared according to the Australian Work Health and Safety (WHS) act and the Code of Practice on preparation of safety data sheets for Hazardous Chemicals.

### List of substances included in the NICNAS:

Glucanase, endo-1,3(4)  $\beta$   
Pectin lyase  
Pectinesterase  
Polygalacturonase

### List of substances included in the AICS inventory:

Glucanase, endo-1,3(4)  $\beta$   
Pectin lyase  
Pectinesterase  
Polygalacturonase

### Poison Schedule (SUSMP):

None Specified

HSNO Group Standard: HSR002503

HSNO Hazard Classification: 6.5A. - Respiratory sensitisation Category 1

---

## 16. Other information

Code	Description
------	-------------

H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
------	--

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

BCF: Biological Concentration Factor

BEI: Biological Exposure Index

BOD: Biochemical Oxygen Demand

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CAV: Poison Center

CE: European Community

CLP: Classification, Labeling, Packaging.

CMR: Carcinogenic, Mutagenic and Reprotoxic

COD: Chemical Oxygen Demand

COV: Volatile Organic Compound

CSA: Chemical Safety Assessment

CSR: Chemical Safety Report

DMEL: Derived Minimal Effect Level

DNEL: Derived No Effect Level.

DPD: Dangerous Preparations Directive

DSD: Dangerous Substances Directive

EC50: Half Maximal Effective Concentration

ECHA: European Chemicals Agency  
EINECS: European Inventory of Existing Commercial Chemical Substances.  
ES: Exposure Scenario  
GefStoffVO: Ordinance on Hazardous Substances, Germany.  
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.  
IARC: International Agency for Research on Cancer  
IATA: International Air Transport Association.  
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).  
IC50: half maximal inhibitory concentration  
ICAO: International Civil Aviation Organization.  
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).  
IMDG: International Maritime Code for Dangerous Goods.  
INCI: International Nomenclature of Cosmetic Ingredients.  
IRCCS: Scientific Institute for Research, Hospitalization and Health Care  
KAFH: KAFH  
KSt: Explosion coefficient.  
LC50: Lethal concentration, for 50 percent of test population.  
LD50: Lethal dose, for 50 percent of test population.  
LDLo: Leathal Dose Low  
N.A.: Not Applicable  
N/D: Not defined/ Not available  
NIOSH: National Institute for Occupational Safety and Health  
NOAEL: No Observed Adverse Effect Level  
OSHA: Occupational Safety and Health Administration.  
PBT: Persistent, Bioaccumulative and Toxic  
PGK: Packaging Instruction  
PNEC: Predicted No Effect Concentration.  
PSG: Passengers  
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.  
STEL: Short Term Exposure limit.  
STOT: Specific Target Organ Toxicity.  
TLV: Threshold Limiting Value.  
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).  
vPvB: Very Persistent, Very Bioaccumulative.  
WGK: German Water Hazard Class.

**Paragraphs modified from the previous revision:**

- Safety Data Sheet
- 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING
- 2. HAZARDS IDENTIFICATION
- 3. COMPOSITION/INFORMATION ON INGREDIENTS
- 4. FIRST AID MEASURES
- 5. FIRE-FIGHTING MEASURES
- 6. ACCIDENTAL RELEASE MEASURES
- 7. HANDLING AND STORAGE
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 9. PHYSICAL AND CHEMICAL PROPERTIES
- 10. STABILITY AND REACTIVITY
- 11. TOXICOLOGICAL INFORMATION
- 12. ECOLOGICAL INFORMATION
- 13. DISPOSAL CONSIDERATIONS
- 14. TRANSPORT INFORMATION
- 15. REGULATORY INFORMATION
- 16. OTHER INFORMATION