

Safety Data Sheet

EnartisZym RS(P)

Safety Data Sheet dated: 8/7/2023 - version 1

1. IDENTIFICATION

Product identifier

Mixture identification:

Trade name: EnartisZym RS(P)

Other means of identification:

Product Code: 35-160-0100; 35-160-0001

Recommended use of the chemical and restrictions on use

Recommended use: FOR PROFESSIONAL USE

FOR ENOLOGICAL USE

Restrictions on use: N.A.

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

ESSECO S.r.l. Via San Cassiano 99

28069 - Trecate (NO)

Italy

Importer in USA:

Enartis USA Inc.

7795 Bell Road

Windsor

CA 95492

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

Emergency telephone number

Phone: +1 (707) 838 6312

Fax: +1 (707) 838 1765

2. HAZARD(S) IDENTIFICATION



Classification of the chemical

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

Label elements

Pictograms and Signal Words



Danger

Hazard statements

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

Precautionary statements

P261 Avoid breathing dust.

P284 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 doctor.

Hazards not otherwise classified identified during the classification process:

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

N.A.

Mixtures

Hazardous components within the meaning of 29 CFR 1910.1200 and related classification:

List of components

Qty	Name	Ident. Numb.	Classification	Registration Number
≥ 7 - < 10 %	Polygalacturonase	CAS:9032-75-1 EC:232-885-6	Resp. Sens. 1B, H334	
≥ 3 - < 5 %	Pectinesterase	CAS:9025-98-3 EC:232-807-0	Resp. Sens. 1B, H334	
≥ 3 - < 5 %	Pectin lyase	CAS:9033-35-6 EC:232-894-5	Resp. Sens. 1B, H334	
≥ 1 - < 3 %	Cellulase	CAS:9012-54-8 EC:232-734-4 Index:647-002-00-3	Resp. Sens. 1B, H334	01-2119949289-21-XXXX

4. FIRST AID MEASURES

Description of first aid measures

In case of skin contact:

- Immediately take off all contaminated clothing.
- Remove contaminated clothing immediately and dispose off safely.
- Wash thoroughly the body (shower or bath).
- Seek medical attention if skin irritation, swelling or redness develops and persists.

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.

Most important symptoms/effects, acute and delayed

N.A.

Indication of any immediate medical attention and special treatment needed

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

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media:

- Water.
- Carbon dioxide (CO2).

Unsuitable extinguishing media:

None in particular.

Specific hazards arising from the chemical

- Hazardous combustion products: N.A.
- Explosive properties: N.A.
- Oxidizing properties: N.A.

Special protective equipment and precautions for fire-fighters

- Wear suitable protective clothing (helmet, protective clothings, goggles, fire resistant gloves, boots) and protect respiratory organs (self contained breathing apparatus).
- Use suitable 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.
- 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.

Methods and material for containment and cleaning up

- If the product has escaped into a water course, into the drainage system, or has contaminated the ground or vegetation, notify the competent authorities.
- Dispose of the collected material in accordance with the current regulations.
- Wash with plenty of water.

Retain contaminated washing water and dispose it.

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 open flames, sparks and heat sources.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

Storage temperature: N.A.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

No data available

Appropriate engineering controls: N.A.

Individual protection measures

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.

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).

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.

Suitable material:

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

UNI EN 420/UNI EN 374

Respiratory protection:

Half-face mask with combined filter

Combined filter: E-P2 (yellow-white colour)

Filter mask FFP2/FFP3 for solid particles

Technical reference standard: UNI EN 149

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

Use adequate protective respiratory equipment.

Thermal Hazards:

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State: Solid

Appearance and colour: Solid

Odour: Characteristic

Odour threshold: N.A.

pH: $\pm$ 5.00 (sol 1%)
Melting point / freezing point: N.A.
Initial boiling point and boiling range: N.A.
Flash point: N.A.
Evaporation rate: N.A.
Upper/lower flammability or explosive limits: N.A.
Vapour density: N.A.
Vapour pressure: N.A.
Relative density: N.A.
Solubility in water: 100%
Solubility in oil: N.A.
Partition coefficient (n-octanol/water): N.A.
Auto-ignition temperature: N.A.
Decomposition temperature: N.A.
Viscosity: N.A.
Explosive properties: N.A.
Oxidizing properties: N.A.
Solid/gas flammability: N.A.

Other information

Substance Groups relevant properties N.A.
Miscibility: N.A.
Fat Solubility: N.A.
Conductivity: N.A.

10. STABILITY AND REACTIVITY

Reactivity

Stable under normal conditions

Chemical stability

Data not available.

Possibility of hazardous reactions

Conditions to avoid

Stable under normal conditions.

Incompatible materials

None in particular.

Hazardous decomposition products

None

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Toxicological Information of the Preparation

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

Substance(s) listed on the IARC Monographs:

None

Substance(s) listed as OSHA Carcinogen(s):

None

Substance(s) listed as NIOSH Carcinogen(s):

None

Substance(s) listed on the NTP report on Carcinogens:

None

12. ECOLOGICAL INFORMATION

Toxicity

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

N.A.

Bioaccumulative potential

N.A.

Mobility in soil

N.A.

Other adverse effects

N.A.

13. DISPOSAL CONSIDERATIONS

Waste treatment 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

ADR-UN number: N.A.

DOT-UN Number: N.A.

IATA-Un number: N.A.

IMDG-Un number: N.A.

UN proper shipping name

ADR-Shipping Name: N.A.

DOT Proper Shipping Name: N.A.

IATA-Technical name: N.A.

IMDG-Technical name: N.A.

Transport hazard class(es)

ADR-Class: N.A.

DOT Hazard Class: N.A.

IATA-Class: N.A.

IMDG-Class: N.A.

Packing group

ADR-Packing Group: N.A.

ADR exempt: N.A.

IATA-Packing group: N.A.

IMDG-Packing group: N.A.

Environmental hazards

Marine pollutant: No

Environmental Pollutant: N.A.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

N.A.

Special precautions

Department of Transportation (DOT):

N.A.

Road and Rail (ADR-RID):

N.A.

Air (IATA):

N.A.

Sea (IMDG):

N.A.

15. REGULATORY INFORMATION

Listed on Canadian DSL, Australian AICS, Phillipines PICCS, Chinese IECSC, Japanese MITI, Korean KECL, and EU EINECS.

USA - Federal regulations

TSCA - Toxic Substances Control Act

TSCA inventory:

List of substances included in the TSCA inventory:	Polygalacturonase; Pectinesterase; Cellulase
List of substances not included in the TSCA inventory:	Pectin lyase

TSCA listed substances:

No substances listed

SARA - Superfund Amendments and Reauthorization Act

Section 302 - Extremely Hazardous Substances:

No substances listed

Section 304 - Hazardous substances:

No substances listed

Section 313 - Toxic chemical list:

No substances listed

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

Substance(s) listed under CERCLA:

No substances listed

CAA - Clean Air Act

CAA listed substances:

No substances listed

CWA - Clean Water Act

CWA listed substances:

No substances listed

USA - State specific regulations

California Proposition 65

Substance(s) listed under California Proposition 65:

No substances listed

Massachusetts Right to know

Substance(s) listed under Massachusetts Right to know:

No substances listed

Pennsylvania Right to know

Substance(s) listed under Pennsylvania Right to know:

No substances listed

New Jersey Right to know

Substance(s) listed under New Jersey Right to know:

No substances listed

16. OTHER INFORMATION**Code Description**

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

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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. The information relates only to the specific material and may not be valid for such material used in combination with any other material or in any process.

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

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:

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

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

IMDG: International Maritime Code for Dangerous Goods.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

CLP: Classification, Labeling, Packaging.

EINECS: European Inventory of Existing Commercial Chemical Substances.

INCI: International Nomenclature of Cosmetic Ingredients.

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

GefStoffVO: Ordinance on Hazardous Substances, Germany.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

DNEL: Derived No Effect Level.

PNEC: Predicted No Effect Concentration.

TLV: Threshold Limiting Value.

TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

WGK: German Water Hazard Class.

KSt: Explosion coefficient.

Not Available

The information in this SDS is provided all the relevant data fully and truly. However, the information is provided without any warranty on their absolute extensiveness and accuracy. This SDS was prepared to provide safety preventive measures for the users who have got professional training. The personal user who obtained this SDS should make independent judgment for the applicability of this SDS under special conditions. In these special cases, we do not assume responsibility for the damage.