



Safety Data Sheet dated 7/2/2017, version 1

1. Identification

GHS Product identifier

Mixture identification:

Trade name: ENARTIS ZYM RS4F

Recommended use of the chemical and restrictions on use

Recommended use:

FOR PROFESSIONAL USE

Restrictions on use:

Supplier's details

Company:

Esseco S.r.l. Via San Cassiano 99

28069 - Trecate (NO)

Italy

Enartis - Phone n. +39-0321-790300

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

Importer's details

Company:

ENARTIS PACIFIC PTY LTD

21 Yorkshire - Richmond

Victoria 3121 - Australia

Ph. +61 (03) 9428 0037

PO Box 4304 - Marewa

Napier - New Zealand

Ph. +63 (06) 8434 413

Emergency phone number

Esseco - Phone n. +39-0321-7901


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

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

GHS label elements, including precautionary statements

Hazard pictograms:



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.

Special Provisions:

None
Other hazards which do not result in a classification
No other hazards

3. Composition/information on ingredients

Substances

No Data Available

Mixtures

Qty	Name	Ident. Number	Classification
>= 1% - < 3%	Pectin lyase	CAS: 9033-35-6 EC: 232-894-5	⚠ 3.4.1/1 Resp. Sens. 1 H334
>= 0.5% - < 1%	Pectinesterase	CAS: 9025-98-3 EC: 232-807-0	⚠ 3.4.1/1 Resp. Sens. 1 H334
>= 0.5% - < 1%	Polygalacturonase	CAS: 9032-75-1 EC: 232-885-6	⚠ 3.4.1/1 Resp. Sens. 1 H334
>= 0.5% - < 1%	Glucanase, endo-1,3(4) β	CAS: 62213-14-3 EC: 263-462-4	⚠ 3.4.1/1 Resp. Sens. 1 H334

4. First-aid measures

Description of necessary first-aid measures

In case of skin contact:

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash with plenty of water and soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

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

None

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).

Treatment:

None

5. Fire-fighting measures

Suitable extinguishing media

Water.

Carbon dioxide (CO₂).

Unsuitable extinguishing media:

None in particular.

Specific hazards arising from the chemical

Do not inhale explosion and combustion gases.

Hazardous combustion products:

None

Explosive properties: No Data Available

Oxidizing properties: No Data Available

Special protective equipment and precautions for fire-fighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

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.

Suitable material for taking up: absorbing material, organic, sand

Methods and material for containment and cleaning up

Wash with plenty of water.

7. Handling and storage

Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

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

Store at below 20 °C. Keep away from unguarded flame and heat sources. Avoid direct exposure to sunlight.

Keep away from food, drink and feed.

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 occupational exposure limit available

Appropriate engineering controls

None

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

Eye protection:

Not needed for normal use. Anyway, operate according good working practices.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection.

Suitable material:

UNI EN 420/UNI EN 374

Respiratory protection:

Gas filtering device (DIN EN 141).
 Thermal Hazards:
 None

9. Physical and chemical properties

Properties	Value	Method:	Notes:
Appearance and colour:	Liquid	--	--
Odour:	Characteristic	--	--
Odour threshold:	No Data Available	--	--
pH:	4.5	--	--
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	--	--
Solid/gas flammability:	No Data Available	--	--
Upper/lower flammability or explosive limits:	No Data Available	--	--
Vapour pressure:	No Data Available	--	--
Vapour density:	No Data Available	--	--
Relative density:	1.3 g/cm ³	--	--
Solubility in water:	No Data Available	--	--
Solubility in oil:	100%	--	--
Partition coefficient (n-octanol/water):	No Data Available	--	--
Auto-ignition temperature:	No Data Available	--	--
Decomposition temperature:	No Data Available	--	--
Viscosity:	No Data	--	--

	Available		
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10. Stability and reactivity

- Reactivity
 - Stable under normal conditions
- Chemical stability
 - Stable under normal conditions
- Possibility of hazardous reactions
 - None
- Conditions to avoid
 - Stable under normal conditions.
 - Heat
- Incompatible materials
 - Oxidants, alkalis, strong acids
- Hazardous decomposition products
 - None.

11. Toxicological information

Toxicological information of the product:

ENARTIS ZYM RS4F

- 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. 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

Toxicological information of the main substances found in the product:

No Data Available

12. Ecological information

Ecotoxicity

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

ENARTIS ZYM RS4F

Not classified for environmental hazards

Based on available data, the classification criteria are not met

Persistence and degradability

No Data Available

Bioaccumulative potential

No Data Available

Mobility in soil

No Data Available

Other adverse effects

None

13. Disposal methods

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

UN number

Not classified as dangerous in the meaning of transport regulations.

UN proper shipping name

N.A.

Transport hazard class(es)

N.A.

Packing group, if applicable

N.A.

Environmental hazards

No

Special precautions for user

N.A.

Additional Information

N.A.

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

None Specified

List of substances included in the AICS inventory

Pectin lyase

Pectinesterase

Polygalacturonase

Glucanase, endo-1,3(4) β

Poison Schedule (SUSMP)

None Specified

HSNO Group Standard: HSR002503

HSNO Hazard Classification: 6.5A

16. Other information

Full text of phrases referred to in Section 3:

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

Paragraphs modified from the previous revision:

- 1. Identification
- 5. Fire-fighting measures
- 10. Stability and reactivity
- 15. Regulatory information
- 16. Other information

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.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
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).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
N.A.:	Not Available
PNEC:	Predicted No Effect Concentration.
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.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.