

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 28-Aug-2019

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Powering Business Worldwide

## Panzym Second Yield

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Trade name/designation:

Panzym Second Yield

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture:

Enzyme preparations are biocatalysts used in a variety of industrial processes within food manufacturing

#### 1.3. Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor):

Eaton Technologies GmbH

Langenlonsheim Branch

An den Nahewiesen 24

55450 Langenlonsheim

Germany

Telephone: +49 6704 204-0 (Diese Nummer ist nur zu Bürozeiten besetzt.)

Telefax: +49 6704 204-121

E-mail: SDB@Eaton.com

Website: www.eaton.com/filtration

#### 1.4. Emergency telephone number

Notfallauskunft bei Vergiftungen: Giftinformationszentrum Mainz (Deutsch und Englisch). Emergency medical information: Poison information center Mainz (German and English)., 24h: +49 6131 19240

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]:

Hazard classes and hazard categories	Hazard statements	Classification procedure
Respiratory or skin sensitisation (Resp. Sens. 1)	H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.	

#### 2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms:



GHS08

Health hazard

Signal word: Danger

#### hazard statements for health hazards

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

#### Precautionary statements Prevention

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P285 In case of inadequate ventilation wear respiratory protection.

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### Precautionary statements Response

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/doctor/....

### 2.3. Other hazards

#### Adverse physicochemical effects:

On basis of test data.: none

#### Adverse human health effects and symptoms:

Repeated inhalation of enzyme dust or aerosols resulting improper handling may induce sensitization and may cause allergic type 1 reactions in sensitized individuals.

Irritant effect on the skin: mild irritant.

Irritant effect on the eye: mild irritant.

#### Adverse environmental effects:

On basis of test data.: none

## SECTION 3: Composition / information on ingredients

### \* 3.2. Mixtures

#### Description:

Enzymes are defined as enzyme concentrate (dry matter basis).

Active enzymoproteine (AEP):

Pectin lyase: 2.5 - < 5 Gew.%

Polygalacturonase : 0.1 - < 1 Gew.%

#### Hazardous ingredients / Hazardous impurities / Stabilisers:

product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 9033-35-6 EC No.: 232-894-5	<b>Lyase, pectin</b> The substance is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP]. <b>Danger</b> H334	5 - < 10 Wt %
CAS No.: 9032-75-1 EC No.: 232-885-6	<b>Polygalacturonase</b> The substance is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP]. <b>Danger</b> H334	1 - < 2.5 Wt %

Full text of H- and EUH-phrases: see section 16.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information:

Accidental release measures high concentrations

#### Following inhalation:

Effects: May produce an allergic reaction.

Symptoms: May cause allergy or asthma symptoms or breathing difficulties if inhaled. Cough

Remove casualty to fresh air and keep warm and at rest. In case of allergic symptoms, especially in the breathing area, seek medical advice immediately.

#### In case of skin contact:

Effects: Frequently or prolonged contact with skin may cause dermal irritation.

Symptoms: mild irritant.

After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, consult a physician.

IF ON CLOTHING: Take off immediately all contaminated clothing. Wash contaminated clothing prior to re-use.

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### After eye contact:

Effects: Irritating to eyes.

Symptoms: mild irritant.

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing.

### After ingestion:

Effects: The following symptoms may occur: After ingestion Gastrointestinal complaints Nausea Vomiting  
Symptoms: irritant.

Rinse mouth immediately and drink plenty of water. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

### 4.2. Most important symptoms and effects, both acute and delayed

No data available

### \* 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

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

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### Suitable extinguishing media:

Carbon dioxide (CO<sub>2</sub>), Water mist, alcohol resistant foam, Dry extinguishing powder

#### Unsuitable extinguishing media:

none

### 5.2. Special hazards arising from the substance or mixture

May produce an allergic reaction.

### 5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

## SECTION 6: Accidental release measures

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

#### 6.1.1. For non-emergency personnel

##### Personal precautions:

See protective measures under point 7 and 8.

#### 6.1.2. For emergency responders

No data available

### 6.2. Environmental precautions

No special environmental measures are necessary.

Collect spillage.

### 6.3. Methods and material for containment and cleaning up

#### For cleaning up:

Conditions to avoid: generation/formation of aerosols. Generation/formation of dust

Take up by mechanical means preferably by a vacuum cleaner equipped with a high efficiency filter.

Flush remainder carefully with plenty of water. Avoid splashing and high pressure washing (avoid formation of aerosols).

Provide adequate ventilation.

#### 6.4. Reference to other sections

No data available

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### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

##### Protective measures

##### Advices on safe handling:

Conditions to avoid: generation/formation of aerosols. Generation/formation of dust

Provide adequate ventilation as well as local exhaustion at critical locations.

Liquid enzyme preparations are dustfree preparations. However, inappropriate handling may cause formation of dust or aerosols. for appropriate handling, see section 6 and 7. Inhalation of enzyme dust or aerosols resulting from handling may induce sensitization and may cause allergic reactions in sensitized individuals. Prolonged skin contact may cause minor irritation.

##### Fire prevent measures:

No special fire protection measures are necessary.

#### 7.2. Conditions for safe storage, including any incompatibilities

##### Requirements for storage rooms and vessels:

Keep container tightly closed in a cool, well-ventilated place.

storage temperature 0 - 10 °C

#### 7.3. Specific end use(s)

##### Recommendation:

The product should be handled with the care usual when dealing with chemicals.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

No data available

#### 8.2. Exposure controls

##### 8.2.1. Appropriate engineering controls

Provide adequate ventilation as well as local exhaustion at critical locations.

##### 8.2.2. Personal protection equipment

##### Eye/face protection:

Tightly sealed safety glasses.

##### Skin protection:

Thorough skin-cleansing after handling the product.

Hand protection: The selection of suitable gloves not only depends on the material, but also on other quality characteristics. These may vary from manufacturer to manufacturer. Since the product is a preparation from several substances, the resistance of glove materials cannot be determined in advance and must therefore be checked prior to the application.

Suitable material: The glove material has to be impermeable and resistant to the product/the substance/the preparation. Due to missing tests no recommendation to the glove material can be given for the product/the preparation/the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Breakthrough time (maximum wearing time): The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

##### Respiratory protection:

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

Suitable respiratory protection apparatus: Particle filter device (DIN EN 143) P 3

##### Other protection measures:

Protective clothing: lab coat

General health and safety measures: The usual precautionary measures are to be adhered to when handling chemicals.

##### 8.2.3. Environmental exposure controls

No data available

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### \* 8.3. Additional information

inhalative, long-term, local  
DMEL worker  
Pectin lyase (aep): 60 ng/m<sup>3</sup>  
Polygalacturonase (aep): 60 ng/m<sup>3</sup>

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

#### Appearance

**Physical state:** Liquid

**Colour:** brown

**Odour:** slight fermentation odour

#### Safety relevant basis data

parameter		at °C	Method	Remark
pH	<i>not determined</i>			
Melting point	<i>not determined</i>			
Freezing point	<i>not determined</i>			
Initial boiling point and boiling range	<i>not determined</i>			
Decomposition temperature	<i>not determined</i>			
Flash point	<i>not determined</i>			
Evaporation rate	<i>not determined</i>			
Auto-ignition temperature	<i>not determined</i>			
Upper/lower flammability or explosive limits	<i>not determined</i>			
Vapour pressure	<i>not determined</i>			
Vapour density	<i>not determined</i>			
Density	1.18 g/ml			
Bulk density	<i>not determined</i>			
Water solubility	<i>not determined</i>			
Partition coefficient: n-octanol/ water	<i>not determined</i>			
Dynamic viscosity	<i>not determined</i>			
Kinematic viscosity	<i>not determined</i>			

### 9.2. Other information

Odour, pH Value, Boiling Point, Melting Point, Flash Point, Ignition temperature, Vapour pressure, Density and Solubility are not relevant to safety. For further information see the Product Specification and the Product Sheet for this preparation.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

not relevant

### 10.2. Chemical stability

Substance is, under normal conditions, chemically stable.

### 10.3. Possibility of hazardous reactions

No data available

### 10.4. Conditions to avoid

none

### 10.5. Incompatible materials

none

### 10.6. Hazardous decomposition products

This article doesn't contain hazardous substances or mixtures intended to be released under normal or reasonably foreseeable conditions of use.

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### SECTION 11: Toxicological information

#### \* 11.1. Information on toxicological effects

CAS No.	Substance name	Toxicological information
9033-35-6	Lyase, pectin	<b>LD<sub>50</sub> oral:</b> 2,000 mg/kg OECD TG 401,420
9032-75-1	Polygalacturonase	<b>LD<sub>50</sub> oral:</b> 2,000 mg/kg OECD TG 401, 420

#### Skin corrosion/irritation:

Not an irritant. (OECD 404)

#### Serious eye damage/irritation:

Not an irritant. (OECD 405 )

#### Respiratory or skin sensitisation:

May cause sensitization by inhalation.

#### Carcinogenicity:

No indications of human germ cell mutagenicity exist.

OECD 471 (Ames test), OECD 476

### SECTION 12: Ecological information

#### 12.1. Toxicity

##### Aquatic toxicity:

Acute Daphnia toxicity

EC50 (48h): 31,7 - 457 mg aep/l (OECD 202 )

Algae toxicity

ErC50: (72h): > 5,2 mg aep/l (OECD 201 )

Acute fish toxicity

LC50: (96h): 58,3 - 326,7 mg aep/l (OECD 203

##### Terrestrial toxicity:

No data available

##### Effects in sewage plants:

No data available

#### 12.2. Persistence and degradability

##### Additional information:

Further ecological information: Partition coefficient: n-octanol/water: < 0

The organic part of the product is biodegradable.

According to the present state of knowledge negative ecological effects are not expected.

#### 12.3. Bioaccumulative potential

##### Accumulation / Evaluation:

No indication of bioaccumulation potential.

#### 12.4. Mobility in soil

not relevant

#### 12.5. Results of PBT and vPvB assessment

CAS No.	Substance name	Results of PBT and vPvB assessment
9033-35-6	Lyase, pectin	—
9032-75-1	Polygalacturonase	—

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

#### 12.6. Other adverse effects

No data available

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### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

Do not allow to enter into surface water or drains.

#### Waste treatment options

##### Appropriate disposal / Package:

Non-contaminated packages may be recycled.

### SECTION 14: Transport information

No dangerous good in sense of these transport regulations.

#### 14.1. UN-No.

not relevant

#### 14.2. UN proper shipping name

not relevant

#### 14.3. Transport hazard class(es)

not relevant

#### 14.4. Packing group

not relevant

#### 14.5. Environmental hazards

not relevant

#### 14.6. Special precautions for user

not relevant

#### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not relevant

### SECTION 15: Regulatory information

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

##### 15.1.1. EU legislation

No data available

##### 15.1.2. National regulations

##### [DE] National regulations

#### Water hazard class (WGK)

##### WGK:

1 - schwach wassergefährdend

##### Source:

S Selbsteinstufung

#### \* 15.2. Chemical Safety Assessment

For this substance a chemical safety assessment has not been carried out.

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### SECTION 16: Other information

#### 16.1. Indication of changes

3.2.	Mixtures
4.3.	Indication of any immediate medical attention and special treatment needed
8.3.	Additional information
11.1.	Information on toxicological effects
15.2.	Chemical Safety Assessment

#### 16.2. Abbreviations and acronyms

No data available

#### 16.3. Key literature references and sources for data

No data available

#### 16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Classification according to Regulation (EC) No 1272/2008 [CLP]:

Hazard classes and hazard categories	Hazard statements	Classification procedure
Respiratory or skin sensitisation ( <i>Resp. Sens. 1</i> )	H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.	

#### 16.5. Relevant R-, H- and EUH-phrases (Number and full text)

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

#### 16.6. Training advice

No data available

#### 16.7. Additional information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

\* Data changed compared with the previous version