Safety data sheet
according to Regulation (EC) No. 1907/2006

Date: 20.09.2017

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier
Product name: Enzympräparate, trocken / Enzyme preparations, powdered
(Natuzym-WM, -WG, -CM, -L, -Arom, -Filtration; Glucoseoxidase;
Lysozym; Pectin-EX 100; Membranreinigungsenzym)

Article: please see specification of the product
Chemical name: Enzyme preparations, powder
Registration number: See section 3 for substances contained in the mixture

1.2 Relevant identified uses of the substance or mixture and uses advised against
Processing aid for food manufacturing: Preparation of fruit juices,
wines and distilling mashes from fruits

1.3 Details of the supplier of the safety data sheet
Company: C. Schliessmann Kellerei-Chemie GmbH & Co KG
Auwiesenstr. 5, D-74523 Schwäbisch Hall
Tel. 0049-(0)791 / 97191 -0, Fax -25
E-Mail: service@c-schliessmann.de

1.4 Emergency telephone number
Poison centre Freiburg: Tel. 0049-(0)761 / 19240

2. Hazards identification

2.1 Classification of the substance or mixture
Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

2.2 Label elements according to Regulation (EC) No 1272/2008
Hazard pictograms:

Signal word: DANGER

Hazardous component: Enzyme protein

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

Precautionary statements: P261 Avoid breathing dust / fume / gas / mist / vapours / spray.
P304+P340 IF INAHALED: Remove person to fresh air and keep comfortable for breathing
P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor

2.3 Other hazards
No informations available

3. Composition/information on ingredients

3.1 Substance
The product is a mixture.
### 3.2 Mixtures

Powdered mixtures of up to 90% maltodextrin and enzyme protein

- **Dangerous component:** pectinase, lysozyme, β-glucanase, β-glucosidase, glucoseoxidase
- **CAS:** 9033-35-6, 12650-88-3, 9073-49-8, 9001-22-3, 9001-37-0
- **Reg.nr.:** not available
- **Classification:** Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- **Content:** <30%; lysozyme up to 100%

### 4. First aid measures

#### 4.1 Description of first aid measures

- **After inhalation:** Remove from exposure into fresh air immediately and rest in a position comfortable for breathing. If irritation of the respiratory system or allergic symptoms occur, consult a doctor.
- **After skin contact:** Wash off with soap and water. Remove dirty clothing. Medical treatment in case of skin irritation.
- **After eye contact:** Rinse opened eye for 10 minutes under running water. Consult a doctor in case of eye irritation.
- **After swallowing:** Rinse out mouth and drink 2 glasses of water. Seek medical advice in case of allergic reaction of the respiratory system.

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

- **After inhalation:** May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- **After skin contact:** No known significant effects or critical hazards.
- **After eye contact:** Slight irritation possible.
- **After swallowing:** No known significant effects or critical hazards.

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

Contact poison treatment or allergen specialist immediately if large quantities have been inhaled or ingested.

### 5. Firefighting measures

#### 5.0 Combustibility

The product is combustible.

#### 5.1 Suitable extinguishing agents

Foam, powder, CO$_2$ or water spray.

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


#### 5.3 Advice for firefighters

Extinguishing activities according to the environment; wear self-contained respiratory protective device, avoid inhaling dust of the product.

### 6. Accidental release measures

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

Avoid formation and inhaling of dust.

#### 6.2 Environmental precautions

Disposal after spillage by solution and dilution with water into an approved sewer.

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

Mop or sweep up and clean with plenty water.

#### 6.4 Reference to other sections

See Section 13 for disposal information.

### 7. Handling and storage

#### 7.1 Precautions for safe handling

Avoid formation of dust. See notes in Section 2 and 8.

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

Keep closed and dry at 15-25°C.

#### 7.3 Specific end use(s)

See section 1.2

### 8. Exposure controls/personal protection
8.1 Control parameters
The product contains no relevant quantities of substances for WEL.

8.2 Exposure controls
Personal protective equipment:
Respiratory protection: Suitable respiratory equipment when dusts/aerosols are generated. Filter-type P3
Eye protection: Safety goggle with side protection.
Skin protection: Impermeable protective gloves.
General hygiene considerations: In accordance with good industrial hygiene and safety practices. Application of skin-protective barrier cream recommended. Wash hands after working with substance.

9. Physical and chemical properties
<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Solid, granulated powder</td>
</tr>
<tr>
<td>Colour</td>
<td>Slightly brown</td>
</tr>
<tr>
<td>Odour</td>
<td>Typical for fermentation products.</td>
</tr>
<tr>
<td>pH-value</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting temperature</td>
<td>Combustion</td>
</tr>
<tr>
<td>Boiling temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Ignition temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not available</td>
</tr>
<tr>
<td>Danger of explosion</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>Not available</td>
</tr>
<tr>
<td>Relative vapor density</td>
<td>Not available</td>
</tr>
<tr>
<td>Density</td>
<td>Not available</td>
</tr>
<tr>
<td>Bulk density</td>
<td>Not available</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>Readily soluble in water</td>
</tr>
</tbody>
</table>

10. Stability and reactivity
10.1 Reactivity
See section 10.3

10.2 Chemical stability
No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions
Risk of dust explosion.

10.4 Conditions to avoid
No information available.

10.5 Incompatible materials
No information available.

10.6 Hazardous decomposition products
In case of fire: see section 5.

11. Toxicological information
11.1 Information on toxicological effects
Acute toxicity (enzyme protein):
LD50 (oral, rat): >2g/kg (not toxic)

Subacute/chronic toxicity: Once sensitized, a strong allergic reaction of the respiratory system may occur following a subsequent exposure to very low levels.

CMR effects:
Mutagenicity: No classification as mutagenic or teratogenic toxicant.
Carcinogenicity: No classification as carcinogenic toxicant.
Reproductive toxicity: No classification as reproductive toxicant.

11.2 Further information
See section 4 for symptoms after direct contact with the product.

12. Ecological information
12.1 Aquatic toxicity
Not toxic for water organisms, but no exact data available.

12.2 Persistence and degradability
Readily biodegradable.
12.3 Bioaccumulative potential  
No data available.

12.4 Mobility in soil  
No data available.

12.5 Results of PBT and vPvB assessment  
No data available.

12.6 Other adverse effects  
No further relevant information available.

13. Disposal considerations
Disposal by flushing with water into an approved sewer or according to official regulations. Little quantities may be rinsed away with plenty of water.

14. Transport information
Not subject to transport regulations. NOT CLASSIFIED AS DANGEROUS GOODS.

15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Information about limitation of use: /

Waterhazard class: Not hazardous for water.

16. Other information
The information provided on this SDS are correct to the best of our knowledge and information. These informations are designed as a guide for safe handling. They are no guarantee for specific characteristics of the product.