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

- Informations to product No. 11
- Product name:

**Reisstärke**  
**Amylum Oryzae**  
 Rice starch

- Supplier of the Product / responsible Company:

Caesar & Loretz GmbH  
 Herderstr. 31  
 40721 Hilden  
 Tel.: 02103/4994-0  
 Fax: 02103/32360  
 e-mail: info@caelo.de

- Emergency telephone:

Giftinformationszentrum Mainz  
 Langenbeckstr. 1, 55131 Mainz  
 Tel.: 06131/19240

- Relevant identified uses of the substance or mixture and uses advised against:

No further relevant information available.

- Application of the substance / mixture:

Ingredient for pharmaceutical drugs or active pharmaceutical ingredient.

## 2 Hazards identification

- Hazards identification: The substance is not classified as dangerous according to European Union legislation.

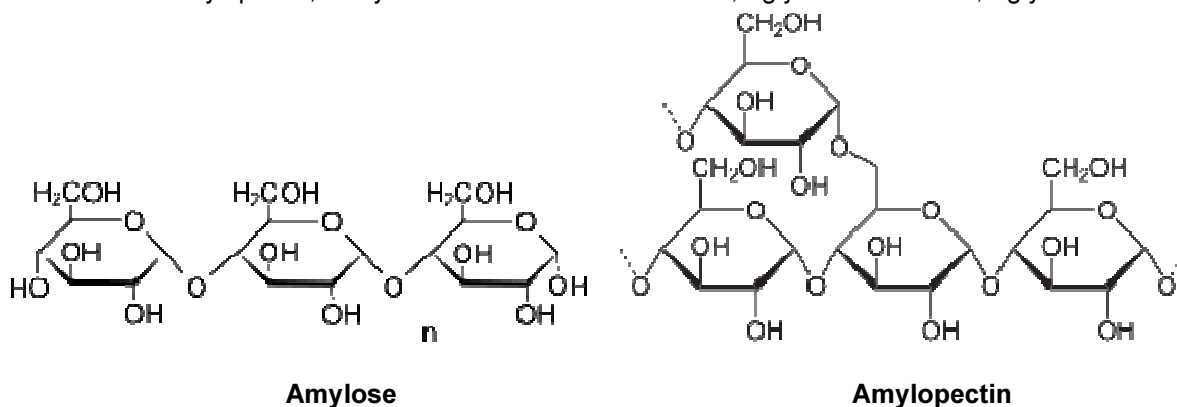
## 3 Composition / information on ingredients


- Chemical characterization:

- Chemische Charakterisierung:

Polysaccharide, molecular formula  $(C_6H_{10}O_5)_n$ , composed of alpha-D-Glucose-units. Naturally occurring substance: Reserve substance, generated and stored in plant cells.

The molecules are composed of D-Glucose-units, linked together over glycosidic bonds. Starch is composed of 20–30 % amylose (chains with helical structure, only linked over  $\alpha$ -1,4-glykosidic bonds) and 70–80 % amylopectin, richly branched structures with  $\alpha$ -1,6-glykosidic and  $\alpha$ -1,4-glykosidic links.



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**CAS-No. Substance name**

9005-25-8 Starch

• **EINECS-No.:** 232-679-6

• **REACH Reg. No.:** Exempted from the obligation to register according to Annex 4 / 5 REACH-regulation.

• **INCI-Name:** Oryza Sativa Starch

## 4 First aid measures

- **after inhalation:** Fresh air
- **after skin contact:** Wash off with water.
- **after eye contact:** Rinse off with water.
- **after swallowing:** If feeling unwell after swallowing big quantities seek medical advice.

## 5 Fire-fighting measures

- **Suitable extinguishing media:** Combustible. All regular extinguishing media can be used. Select fire fighting measures suitable to surrounding environment.
- **Specific hazards during fire fighting:** Combustible. Dust explosion possible. In case of fire dangerous vapours/gases can be generated: Smoke gases.
- **Special protective equipment for fire-fighters:** Suitable protective clothes and respiratory protection.

## 6 Accidental release measures


- **Personal protective measures:** Avoid dust generation.
- **Environmental protective measures:** No special measures required.
- **Methods for cleaning:** Take up dry. Disposal according to Chapter 13 of this MSDS. Clean up with water.
- **General information:** No hazardous substances are released.

## 7 Handling and storage

- **Handling:** No special requirements.
- **Storage:**
- **Requirements for storage areas and containers:** Tightly closed. Store at a dry place. At room temperature ( +15°C to +25°C ).

## 8 Exposure controls / personal protective equipment

- **Personal protective equipment:**
- **General protective and hygiene measures:** The usual precaution measures during handling of chemicals are to observe.
- **Respiratory protection:** Dust protection mask.
- **Hand protection:** Not required.
- **Eye protection:** Not required.

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## 9 Physical and chemical properties

- **Form:** solid
- **Colour:** white
- **Odour:** odourless
- **Melting point / melting range:** decomposition above ca. 200 °C
- **Explosion hazard:** Danger of dust explosion.
- **Density:** (20 °C) ca. 1,5 g/cm<sup>3</sup>
- **Bulk density:** ca. 0,55 - 0,7 g/cm<sup>3</sup>
- **Solubility in / Miscibility with**
- **Water:** at 20 ° not readily soluble, at 95 °C ca. 50 g/l

## 10 Stability and reactivity

- **Thermal decomposition / conditions to avoid:** Rapid heating.
- **Materials to avoid:** Strong oxidants.
- **Hazardous reactions:** No hazardous reactions known.
- **Hazardous decomposition products:** None.

## 11 Toxicological information

- **Acute toxicity:** No acute toxicity. LD50 Mouse, i.p.: 6600 mg/kg. Food ingredient.
- **Additional toxicological informations:** In case of appropriate handling and usage the product does not cause harmful effects.

## 12 Ecological information


- **Information about elimination (persistence and degradability):** Readily biodegradable.
- **Aquatic toxicity:** Quantitative ecotoxicological data for this product are not available. Naturally occurring substance. Can lead to lack of oxygen in big quantities in water.  
BSB(35):0,81 g/g, 25°C (marine water);  
ThSB: 1,18 g/g
- **Water hazard class:** 1 (VwVwS): slightly hazardous for water.

## 13 Disposal considerations

- **Product:**
- **Recommendation:** Disposal according to local regulations as pharmaceutical waste.
- **Empty contaminated packaging:**
- **Recommendation:** Disposal according to the local regulations.

## 14 Transport informations

- **Land transport according to ADR:**  
Not classified as dangerous in the meaning of transport regulations.

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## 15 Regulatory information

· **Labelling according to actual legislation (GHS, Globally Harmonized System of Classification and Labelling of Chemicals):**

The product does not need to be labelled according to GHS-regulations.

· **National regulations (Germany):**

· **Water hazard class:** see chapter 12

· **Storage class TRGS 510:** 11

## 16 Other Information

The information provided in this MSDS is correct to the best of our knowledge at the date of edition.