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

- **Product identifier**
- **Trade name:** Protein Standard II
- **Article number:** 207234
- **Application of the substance / the preparation** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:** Bruker Daltonik GmbH
  - Fahrenheitstrasse 4
  - D-28359 Bremen / Germany
  - Tel.: +49(421) 2205-0
  - Fax : +49(421) 2205-100
  - E-mail: care@bdal.de
- **Informing department:**
  - Bruker Daltonik GmbH
  - Tel.: +49 (421) 2205-240
- **Emergency telephone number:**
  - Emergency Phone :  +61 3 9474 7000 ; 1800 278537 ; +49 421 2205 0
  - Tel.: +49 (361)730730
  - Gemeinsames Giftinformationszentrum (GGIZ) (Posion Information Center)

2 Composition/information on ingredients

- **Chemical characterization:** Mixtures
- **Description:** Protein mixture, lyophilised

<table>
<thead>
<tr>
<th>Hazardous components</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS: 9002-08-8</td>
</tr>
<tr>
<td>Index number: 647-014-00-9</td>
</tr>
<tr>
<td>Trypsinogen</td>
</tr>
<tr>
<td>H334; H315; H319; H335</td>
</tr>
<tr>
<td>2.5-10%</td>
</tr>
</tbody>
</table>

3 Hazards identification

- **Classification of the substance or mixture**
  - GHS08 health hazard

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

  **Label elements**
  - **GHS label elements**
    - The product is classified and labelled according to the Globally Harmonized System (GHS).
  - **Hazard pictograms**

  GHS08
  - **Signal word** Danger

  **Hazard-determining components of labelling:**
  - Trypsinogen

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

  **Precautionary statements**
  - In case of inadequate ventilation wear respiratory protection.
  - Avoid breathing dust/fume/gas/mist/vapours/spray.

(Contd. on page 2)
Trade name: **Protein Standard II**

**4 First aid measures**

- **General information** Instantly remove any clothing soiled by the product.
- **After inhalation**
  - Take affected persons into the open air and position comfortably
  - Seek medical treatment in case of complaints.
- **After skin contact** Instantly wash with water and soap and rinse thoroughly.
- **After eye contact** Rinse opened eye for several minutes under running water. Then consult doctor.
- **After swallowing**
  - Rinse the mouth with water immediately
  - Seek immediate medical advice.

**5 Firefighting measures**

- **Suitable extinguishing agents**
  - CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
- **For safety reasons unsuitable extinguishing agents**
  - Water with a full water jet.
- **Special hazards arising from the substance or mixture**
  - Formation of poisonous gases during heating or in fires.
- **Protective equipment:**
  - Wear self-contained breathing apparatus.
- **Additional information**
  - Cool endangered containers with water spray jet.

**6 Accidental release measures**

- **Personal precautions, protective equipment and emergency procedures**
  - Wear protective equipment. Keep unprotected persons away.
  - Ensure adequate ventilation.
  - Avoid causing dust.
  - Use breathing protection against the effects of fumes/dust/aerosol.
  - Avoid contact with eyes and skin.
- **Environmental precautions:**
  - Do not allow product to reach sewage system or water bodies.
  - Do not allow to enter the ground/soil.
- **Methods and material for containment and cleaning up:**
  - Collect mechanically.
  - Dispose of the material collected according to regulations.
  - Ensure adequate ventilation.
- **Reference to other sections**
  - Clean the accident area carefully.
  - See Section 13 for information on disposal.
  - See Section 8 for information on personal protection equipment.

**7 Handling and storage**

- **Handling**
- **Precautions for safe handling**
  - Ensure good ventilation/exhaustion at the workplace.
  - Prevent formation of dust.
  - Avoid contact with the eyes and skin.
  - Avoid spilling.
  - Keep eye irrigation utensils (bottle) ready for use at place of work.

(Contd. of page 1)
**Trade name:** Protein Standard II

- **Information about protection against explosions and fires:** No special measures required.
- **Storage**
  - **Requirements to be met by storerooms and containers:** Store only in the original container.
  - **Information about storage in one common storage facility:**
    - Store away from foodstuffs.
    - Store away from oxidizing agents.
  - **Further information about storage conditions:**
    - Keep container tightly sealed.
    - Store in a cool place.
  - **Recommended storage temperature:** < 0°C
  - **Specific end use(s)** No further relevant information available.

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**8 Exposure controls/personal protection**

- **Additional information about design of technical systems:** No further data; see item 7.
- **Components with limit values that require monitoring at the workplace:**
  The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the compilation were used as basis.
- **Personal protective equipment**
- **General protective and hygienic measures**
  - Keep away from foodstuffs, beverages and food.
  - Wash hands during breaks and at the end of the work.
  - Avoid contact with the eyes and skin.
  - Do not inhale dust / smoke / mist.
  - Take off immediately all contaminated clothing
- **Breathing equipment:** If dust is produced.
- **Recommended filter device for short term use:**
  - Filter P1
- **Protection of hands:**
  - Protective gloves.
  - Only use chemical-protective gloves with CE-labelling of category III.

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
- **Material of gloves**
  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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**
  The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Not suitable are gloves made of the following materials:**
  - Leather gloves
  - Strong gloves

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(Contd. on page 4)
Trade name: **Protein Standard II**

- **Eye protection:**
  - Safety glasses

- **Body protection:** Protective work clothing.

### 9 Physical and chemical properties

**General Information**

- **Appearance:** Solid.
- **Colour:**
- **Odour:**

**Change in condition**

- **Melting point/Melting range:** Not determined
- **Boiling point/Boiling range:** Not determined

- **Flash point:** Not applicable

- **Self-inflammability:** Product is not selfigniting.

- **Danger of explosion:** Product is not explosive.

- **Density:** Not determined

**Solubility in / Miscibility with**

- **Water:** Mixable

- **Other information:** No further relevant information available.

### 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

- **Incompatible materials:** Strong oxidizing agents

- **Hazardous decomposition products:** None, if stored and handled correctly.

### 11 Toxicological information

- **Acute toxicity:**

  - **Primary irritant effect:**
    - **on the skin:** Irritative effect possible
    - **on the eye:** Irritative effect possible

  - **Sensitization:** Sensitization possible by inhalation.

### 12 Ecological information

- **Acquatic toxicity:** No further relevant information available.

- **Persistence and degradability:** No further relevant information available.

- **Behaviour in environmental systems:**

  - **Bioaccumulative potential:** No further relevant information available.

- **Ecotoxicological effects:** Not determined

- **Additional ecological information:**

  - **General notes:**
    - Water danger class 3 (German Regulation) (Self-assessment): extremely hazardous for water.
    - Do not allow product to reach ground water, water bodies or sewage system, even in small quantities.

(Contd. on page 5)
Trade name: **Protein Standard II**

Danger to drinking water if even extremely small quantities leak into soil.

(Contd. of page 4)

### 13 Disposal considerations

- **Waste treatment methods**
  - **Recommendation** For disposal, local regulations issued by the authorities must be observed.

- **European waste catalogue**
  - 18 00 00 WASTES FROM HUMAN OR ANIMAL HEALTH CARE AND/OR RELATED RESEARCH (except kitchen and restaurant wastes not arising from immediate health care)
  - 18 02 00 wastes from research, diagnosis, treatment or prevention of disease involving animals
  - 18 02 05* chemicals consisting of or containing dangerous substances

- **Uncleaned packagings:**
  - **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

- **UN-Number**
  - ADR, ADN, IMDG, IATA Void

- **UN proper shipping name**
  - ADR, ADN, IMDG, IATA Void

- **Transport hazard class(es)**
  - ADR, ADN, IMDG, IATA Void

- **Packing group**
  - ADR, IMDG, IATA Void

- **Special precautions for user** Not applicable.

- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

- **Transport/Additional information:** Not dangerous according to the above specifications.

- **UN "Model Regulation":** -

### 15 Regulatory information

- **Australian Inventory of Chemical Substances**
  - 9048-46-8 Albumins, blood serum

- **Standard for the Uniform Scheduling of Drugs and Poisons**
  - None of the ingredients is listed.

- **GHS label elements**
  - The product is classified and labelled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**
  - GHS08

- **Signal word** Danger

(Contd. on page 6)
Trade name: **Protein Standard II**

- **Hazard-determining components of labelling:**
  - Trypsinogen
- **Hazard statements**
  - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- **Precautionary statements**
  - In case of inadequate ventilation wear respiratory protection.
  - Avoid breathing dust/fume/gas/mist/vapours/spray.
  - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
  - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
  - Dispose of contents/container in accordance with local/regional/national/international regulations.

**National regulations**

- **Water hazard class:** Water danger class 3 (Self-assessment): extremely hazardous for water.

## 16 Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Changes made since last issue dated 21.08.2007 at the following points: *

- **Relevant phrases**
  - H315 Causes skin irritation.
  - H319 Causes serious eye irritation.
  - H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
  - H335 May cause respiratory irritation.

- **Department issuing data specification sheet:**
  - IGG-AD Ingenieurbüro für Gefahrstoff- und Gefahrgutberatung
  - Bismarckstraße 10
  - D-68623 Lampertheim
  - Fax: 0049-(0)6206-58422 http://www.igg-ad.de info@igg-ad.de

- **Contact:**
  - Dr. U. Prinz (u.prinz@igg-ad.de)
  - Dipl.-Chem. H. Hinse (heidrun.hinse@igg-ad.de)

- **Abbreviations and acronyms:**
  - ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  - RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
  - IMDG: International Maritime Code for Dangerous Goods
  - IATA: International Air Transport Association
  - ICAO: International Civil Aviation Organization

* Data compared to the previous version altered.