

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

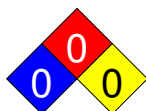
- **Product identifier**
- **Trade name:** **Protein Calibration Standard I**
- **Article number:** 206355
- **Application of the substance / the preparation** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Bruker Daltonik GmbH  
Fahrenheitstrasse 4  
D-28359 Bremen / Germany  
Tel.: +49(421) 2205-0  
Fax : +49(421) 2205-100  
E-mail: care@bdal.de
- **Information 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, lyophilized
- **Dangerous components:** Void

### 3 Hazards identification

- **Classification of the substance or mixture**  
The product is not classified according to the Globally Harmonized System (GHS).
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** not applicable
- **Information concerning particular hazards for human and environment:**  
The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- **Label elements**
- **Labelling according to EU guidelines:**  
Observe the general safety regulations when handling chemicals  
The product is not subject to classification according to the calculation methods of the "General Classification Guideline for Preparations of the EU" as issued in the latest valid version.  
The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (GefStoffV).
- **Classification system**
- **NFPA ratings (scale 0-4)**



Health = 0  
Fire = 0  
Reactivity = 0

### 4 First aid measures

- **General information** Immediately remove any clothing soiled by the product.
- **After inhalation**  
Take affected persons into fresh air and keep quiet.  
Seek medical treatment in case of complaints.

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- **After skin contact** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing**  
Rinse the mouth with water immediately  
Seek immediate medical advice.

## 5 Firefighting measures

- **Suitable extinguishing agents**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents** Water with full jet.
- **Special hazards arising from the substance or mixture**  
During heating or in case of fire poisonous gases are produced.
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information** Cool endangered receptacles with water spray.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.  
Ensure adequate ventilation  
Avoid formation of dust.  
Use respiratory protective device against the effects of fumes/dust/aerosol.  
Avoid contact with eyes and skin.
- **Environmental precautions:**  
Do not allow product to reach sewage system or any water course.  
Do not allow to penetrate the ground/soil.
- **Methods and material for containment and cleaning up:**  
Pick up mechanically.  
Dispose of the collected material according to regulations.  
Ensure adequate ventilation.
- **Reference to other sections**  
Clean the accident area carefully.  
See Section 13 for disposal information.  
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.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:**  
Store away from foodstuffs.  
Store away from oxidizing agents.
- **Further information about storage conditions:**  
Keep receptacle tightly sealed.  
Store in a cool place.
- **Recommended storage temperature:** < 0°C

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· **Specific end use(s)** No further relevant information available.

## 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 creation were used as basis.

· **Personal protective equipment**

· **General protective and hygienic measures**

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Do not inhale dust / smoke / mist.

Immediately remove all soiled and 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 through 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

· **Eye protection:**



Tightly sealed goggles.

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

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## 9 Physical and chemical properties

### · General Information

#### · Appearance:

**Form:** Solid.  
lyophilized

**Color:** Red-brown

· **Odor:** -

### · Change in condition

**Melting point/Melting range:** undetermined

**Boiling point/Boiling range:** undetermined

· **Flash point:** Not applicable

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **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

strong acids

strong bases

· **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:** Prolonged or repeated exposure may cause allergic reactions

### · Additional toxicological information:

Possibly harmful by inhalation, harmful if swallowed and harmful in contact with skin.

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

## 12 Ecological information

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

· **Persistence and degradability** No further relevant information available.

### · Behavior 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 course or sewage system, even in small quantities.

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

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## 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation** For disposal, local regulations issued by the authorities must be observed.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

## 14 Transport information

- **UN-Number**
- **DOT, ADR, ADN, IMDG, IATA** Void
- **UN proper shipping name**
- **DOT, ADR, ADN, IMDG, IATA** Void
- **Transport hazard class(es)**
- **DOT, ADR, ADN, IMDG, IATA**
- **Class** Void
- **Packing group**
- **DOT, 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

### · **Carcinogenicity categories**

#### · **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

#### · **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

#### · **NTP (National Toxicology Program)**

None of the ingredients is listed.

#### · **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

#### · **MAK (German Maximum Workplace Concentration)**

None of the ingredients is listed.

#### · **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

#### · **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

### · **Markings according to EU guidelines:**

Observe the general safety regulations when handling chemicals

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The product is not subject to classification according to the calculation methods of the "General Classification Guideline for Preparations of the EU" as issued in the latest valid version.

The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (GefStoffV).

· **National regulations**

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

· **Sara**

· **Section 355 (Extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**

9007-43-6 Cytochrome c

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

## 16 Other information

This information is based on our present knowledge. However, this 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 20.08.2007 at the following points: \*

· **Department issuing MSDS:**

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](mailto:info@igg-ad.de)

· **Contact:**

Dr. U. Prinz ([u.prinz@igg-ad.de](mailto:u.prinz@igg-ad.de))

Dipl.-Chem. H. Hinse ([heidrun.hinse@igg-ad.de](mailto: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

ACGIH: American Conference of Governmental Industrial Hygienists

NFPA: National Fire Protection Association (USA)

MAL-Code: Måleteknisk Arbejdshygiejnisk Luftbehov (Regulation for the labeling concerning inhalation hazards, Denmark)

· **\* Data compared to the previous version altered.**

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