

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 28.11.2011

Version number 1

Revision: 25.06.2009

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

### 1.1. Product identifier

· Trade name: Lysozyme from chicken egg white

· Article number: 28262

· CAS Number:  
12650-88-3

· EC number:  
235-747-3

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

· Application of the substance / the preparation Laboratory chemicals

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

#### · Manufacturer/Supplier:

SERVA Electrophoresis GmbH  
Carl-Benz-Str. 7  
D-69115 Heidelberg  
Tel.: +49 6221 13840-0  
FAX: +49 6221 13840-10  
msds.info@serva.de

· Information department: Product Safety department Tel.: +49 6221 13840-35

· 1.4. Emergency telephone number: +49 6131 19240 (university hospital Mainz)

**SERVA**  
Electrophoresis

## 2 Hazards identification

### 2.1. Classification of the substance or mixture

· Classification according to Regulation (EC) No 1272/2008



GHS08

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

· Classification according to Directive 67/548/EEC or Directive 1999/45/EC



Xn; Sensitising

R42: May cause sensitisation by inhalation.

#### · Classification system:

The classification was made according to the latest editions of the EU-lists, and expanded upon from company and literature data.

### 2.2. Label elements

· Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

· Hazard pictograms GHS08

· Signal word Danger

#### · Hazard statements

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

#### · Precautionary statements

P261 Avoid breathing dust.

P285 In case of inadequate ventilation wear respiratory protection.

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 or doctor/physician.

### 2.3. Other hazards

· Results of PBT and vPvB assessment

· PBT: Not applicable.

(Contd. on page 2)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 28.11.2011

Version number 1

Revision: 25.06.2009

Trade name: Lysozyme from chicken egg white

(Contd. of page 1)

· **vPvB:** Not applicable.

### 3 Composition/information on ingredients

#### · 3.1. Chemical characterization: Substances

##### · CAS No. Description:

12650-88-3 Lysozyme (chicken egg white)

##### · Identification number(s):

· EC number: 235-747-3

##### · Description:

· MW: ca. 14 400

#### · Regulation (EC) No 648/2004 on detergents / Labelling for contents

enzymes

≥ 30%

### 4 First aid measures

#### · 4.1. Description of first aid measures

· After inhalation Supply fresh air; consult doctor in case of complaints.

· After skin contact Immediately rinse with water.

· After eye contact Rinse opened eye for several minutes under running water.

· After swallowing Drink copious amounts of water and provide fresh air. Call for doctor immediately.

#### · Information for doctor

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

No further relevant information available.

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

No further relevant information available.

### 5 Firefighting measures

#### · 5.1. Extinguishing media

##### · Suitable extinguishing agents

CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

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

In case of fire, the following can be released:

Nitrogen oxides (NO<sub>x</sub>)

Carbon monoxide and carbon dioxide

#### · 5.3. Advice for firefighters

· **Protective equipment:** Wear self-contained respiratory protective device.

### 6 Accidental release measures

· **6.1. Personal precautions, protective equipment and emergency procedures** Wear protective clothing.· **6.2. Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

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

Pick up mechanically.

Dispose contaminated material as waste according to item 13.

#### · 6.4. Reference to other sections

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

GB

(Contd. on page 3)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 28.11.2011

Version number 1

Revision: 25.06.2009

Trade name: *Lysozyme from chicken egg white*

(Contd. of page 2)

## 7 Handling and storage

- **Handling**
- **7.1. Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of dust.
- **Information about protection against explosions and fires:** No special measures required.
- **7.2. Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**  
Keep receptacle tightly sealed.  
Store in dry conditions.
- **7.3. 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.
- **8.1. Control parameters**
- **Components with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **8.2. Exposure controls**
- **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.
- **Breathing equipment:**  
Short term filter device:  
Filter P2.
- **Protection of hands:**  
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.
- **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.
- **For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:**  
Natural rubber, NR  
Nitrile rubber, NBR
- **Eye protection:** Safety glasses
- **Body protection:** Protective work clothing.

GB

(Contd. on page 4)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 28.11.2011

Version number 1

Revision: 25.06.2009

Trade name: Lysozyme from chicken egg white

(Contd. of page 3)

### 9 Physical and chemical properties

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

##### · General Information

##### · Appearance:

Form:	Powder
Colour:	White
· Odour:	Odourless

##### · Change in condition

Melting point/Melting range: undetermined

Boiling point/Boiling range: undetermined

· Flash point: Not applicable

· Flammability (solid, gaseous) Product is not flammable.

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

· Density: Not determined

##### · Solubility in / Miscibility with

Water at 20°C: > 100 g/l

· 9.2. Other information No further relevant information available.

### 10 Stability and reactivity

#### · 10.1. Reactivity

#### · 10.2. Chemical stability

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

· 10.3. Possibility of hazardous reactions No dangerous reactions known

· 10.4. Conditions to avoid No further relevant information available.

· 10.5. Incompatible materials: No further relevant information available.

· 10.6. Hazardous decomposition products: No dangerous decomposition products known

### 11 Toxicological information

#### · 11.1. Information on toxicological effects

##### · Acute toxicity:

##### · LD/LC50 values that are relevant for classification:

Oral LD50	> 2000 mg/kg (Maus)
-----------	---------------------

##### · Primary irritant effect:

· on the skin: No irritant effect.

· on the eye: No irritating effect.

· Sensitization: Sensitization possible through inhalation.

### 12 Ecological information

#### · 12.1. Toxicity

· Aquatic toxicity: No further relevant information available.

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

#### · Behaviour in environmental systems:

· 12.3. Bioaccumulative potential No further relevant information available.

· 12.4. Mobility in soil No further relevant information available.

#### · Additional ecological information:

##### · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.

(Contd. on page 5)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 28.11.2011

Version number 1

Revision: 25.06.2009

**Trade name: Lysozyme from chicken egg white**

(Contd. of page 4)

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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

- **PBT:** PBT - assessment not available.
- **vPvB:** vPvB - assessment not available.
- **12.6. Other adverse effects** No further relevant information available.

### 13 Disposal considerations

**13.1. Waste treatment methods**

**Recommendation**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

**Uncleaned packagings:**

- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

### 14 Transport information

**14.1. UN-Number**

· **ADR, ADN, IMDG, IATA** Void

**14.2. UN proper shipping name**

· **ADR, ADN, IMDG, IATA** Void

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

· **ADR, ADN, IMDG, IATA**

· **Class** Void

**14.4. Packing group**

· **ADR, IMDG, IATA** Void

**14.6. Special precautions for user**

Not applicable.

**14.7. 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

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

**National regulations**

**Technical instructions (air):**

Class	Share in %
I	80-100

· **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

· **15.2. Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 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.

(Contd. on page 6)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 28.11.2011

Version number 1

Revision: 25.06.2009

**Trade name: Lysozyme from chicken egg white**

(Contd. of page 5)

· **Department issuing MSDS:** Product safety department

· **Contact:** +49 6221 13840-35

· **Abbreviations and acronyms:**

*PBT: persistent, bioaccumulative, toxic substance (REACH)*

*vPvB: very persistent, very bioaccumulative substance (REACH)*

*REACH: Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals*

*CLP: Regulation on classification, labelling and packaging of substances and mixtures*

*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*

*GHS: Globally Harmonized System of Classification and Labelling of Chemicals*

*EINECS: European Inventory of Existing Commercial Chemical Substances*

*CAS: Chemical Abstracts Service (division of the American Chemical Society)*

*LC50: Lethal concentration, 50 percent*

*LD50: Lethal dose, 50 percent*

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

-GB-