

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

Printing date 28.11.2011

Version number 1

Revision: 17.02.2009

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

- **1.1. Product identifier**
- **Trade name:** Lectin from Canavalia ensiformis
- **Article number:** 27648
- **CAS Number:**
11028-71-0
- **EC number:**
234-258-2
- **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

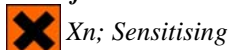
Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.



GHS07

Skin Sens. 1 H317 May cause an allergic skin reaction.

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



Xn; Sensitising

R42/43: May cause sensitisation by inhalation and skin contact.

- **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.
H317 May cause an allergic skin reaction.
- **Precautionary statements**
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P261 Avoid breathing dust.
P285 In case of inadequate ventilation wear respiratory protection.

(Contd. on page 2)

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Revision: 17.02.2009

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(Contd. of page 1)

P302+P352 *IF ON SKIN: Wash with plenty of soap and water.*

P304+P341 *IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.*

P333+P313 *If skin irritation or rash occurs: Get medical advice/attention.*

- **2.3. Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **3.1. Chemical characterization: Substances**
- **CAS No. Description:**
11028-71-0 Concanavalin A
- **Identification number(s):**
- **EC number:** 234-258-2
- **Description:**
- **MW:** ca. 102000

4 First aid measures

- **4.1. Description of first aid measures**
- **After inhalation** Supply fresh air and to be sure call for a doctor.
- **After skin contact** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact**
Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.
- **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**
CO₂, 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**
Formation of toxic gases is possible during heating or in case of fire.
- **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:**
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.

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(Contd. on page 3)

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(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:**
Protect from humidity and water.
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.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
- **Breathing equipment:**
Short term filter device:
Filter P2.
- **Protection of hands:**
Protective gloves.
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
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Version number 1

Revision: 17.02.2009

Trade name: *Lectin from Canavalia ensiformis*

(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: < 10 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

Reacts with oxidizing agents

· 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:

· Primary irritant effect:

· on the skin: No irritant effect.

· on the eye: No irritating effect.

· Sensitization:

Sensitization possible through inhalation.

Sensitization possible through skin contact.

12 Ecological information

· 12.1. Toxicity

· Aquatic toxicity: No further relevant information available.

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

· Other information: The product is easily biodegradable.

· Behaviour in environmental systems:

· 12.3. Bioaccumulative potential No further relevant information available.

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

(Contd. on page 5)

Safety data sheet
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(Contd. of page 4)

- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.
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.

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 |
| · 14.5. Environmental hazards: | Not applicable. |
| · 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.

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(Contd. on page 6)

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(Contd. of page 5)

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.

· **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)

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

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