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

1.1 Product identifier
- Trade name: Albumin bovine Fraction V, pH 7.0
- Synonym: BSA
- Article number: 11930
- CAS Number: 9048-46-8
- EC number: 232-936-2

1.2 Relevant identified uses of the substance or mixture and uses advised against
No further relevant information available.

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:
Medical Emergency Information in case of poisoning:
Poison Information Center Mainz - Phone: +49 (0) 6131 19240
(advisory service in German or English language)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
The substance is not classified according to the CLP regulation.

2.2 Label elements
Labelling according to Regulation (EC) No 1272/2008
- Hazard pictograms: Void
- Signal word: Void
- Hazard statements: Void

2.3 Other hazards
- Results of PBT and vPvB assessment
  - PBT: PBT - assessment not available.
  - vPvB: vPvB - assessment not available.

SECTION 3: Composition/information on ingredients

3.1 Chemical characterisation: Substances
- CAS No. Description:
  9048-46-8 Albumins, blood serum
- Identification number(s):
  - EC number: 232-936-2
  - Description:
    - MW: ca. 67000
SECTION 4: First aid measures

- 4.1 Description of first aid measures
  - General information: No special measures required.
  - After inhalation: Supply fresh air; consult doctor in case of complaints.
  - After skin contact: Immediately wash with water and soap and rinse thoroughly.
  - After eye contact: Rinse opened eye for several minutes under running water. Remove present contact lenses, if easy to do, and continue rinsing. Consult ophthalmologist in case of complaints.
  - After swallowing: Wash out mouth. Seek medical advice if discomfort occurs.

- 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.

SECTION 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
  In case of fire, the following can be formed, but not limited to: Carbon monoxide and carbon dioxide

- 5.3 Advice for firefighters
  - Protective equipment: Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures
  - Wear protective clothing.
  - Ensure adequate ventilation.
  - Avoid contact with the eyes and skin.

- 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 7 for information on safe handling.
  - See Section 8 for information on personal protection equipment.
  - See Section 13 for disposal information.

SECTION 7: Handling and storage

- 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 at +2 to +8 °C

- Information about storage in one common storage facility: Not required.

- Further information about storage conditions: Keep receptacle tightly sealed and store in dry conditions.
 SECTION 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
  The usual precautionary measures should be adhered to when handling chemicals.
- Breathing equipment: Suitable respiratory protective device recommended.
- 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 trough 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:
  Nitrile rubber, NBR
  Chloroprene rubber, CR
- Eye protection: Safety glasses
- Body protection: Protective work clothing.

 SECTION 9: Physical and chemical properties

- 9.1 Information on basic physical and chemical properties
- General Information
- Appearance:
  Form: lyophilisate
  Colour: oyster white
  Odour: Characteristic
- pH-value (70 g/l) at 20 °C: 7
- Change in condition
  Melting point/freezing point: undetermined
  Initial boiling point and boiling range: undetermined
- Flash point: Not applicable
- Flammability (solid, gaseous) Product is not flammable.
- Explosive properties: Product does not present an explosion hazard.
- Density at 20 °C: 1.01 g/cm³
- Solubility in / Miscibility with
  Water at 20 °C: 100 g/l
SECTION 10: Stability and reactivity

- 10.1 Reactivity  No further relevant informations available
- 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- 10.3 Possibility of hazardous reactions  No further relevant informations available.
- 10.4 Conditions to avoid  No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products: In case of fire: See Section 5

SECTION 11: Toxicological information

- 11.1 Information on toxicological effects
- Acute toxicity  Based on available data, the classification criteria are not met.
- Primary irritant effect:
- Skin corrosion/irritation  Based on available data, the classification criteria are not met.
- Serious eye damage/irritation  Based on available data, the classification criteria are not met.
- Respiratory or skin sensitisation  Based on available data, the classification criteria are not met.
- CMR effects (cancer, mutagenicity and toxicity for reproduction)
- Germ cell mutagenicity  Based on available data, the classification criteria are not met.
- Carcinogenicity  Based on available data, the classification criteria are not met.
- Reproductive toxicity  Based on available data, the classification criteria are not met.
- STOT-single exposure  Based on available data, the classification criteria are not met.
- STOT-repeated exposure  Based on available data, the classification criteria are not met.
- Aspiration hazard  Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- 12.1 Toxicity
- Aquatic toxicity  No further relevant information available.
- 12.2 Persistence and degradability  No further relevant information available.
- 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.
  Do not allow product 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.

SECTION 13: Disposal considerations

- 13.1 Waste treatment methods
- Recommendation  Must be specially treated adhering to official regulations.
- Uncleaned packagings:
- Recommendation:
  Disposal of uncleaned packagings must be made according to official regulations in the same manner as the product.
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* Recommended cleansing agent: Water, if necessary with cleansing agents.

**SECTION 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, IMDG, IATA: Void
    - Class: Void
    - Label: -
    - ADN/R Class: Void

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

- **14.5 Environmental hazards:**
  - Marine pollutant: No

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

- **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**
  - Not applicable.

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

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

**SECTION 15: Regulatory information**

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

- **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.

**SECTION 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 SDS:** Product safety department
- **Contact:** +49 6221 13840-35

**Abbreviations and acronyms:**
- RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
- ICAO: International Civil Aviation Organisation
- 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)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- GHS: Globally Harmonised 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)
- PBT: Persistent, Bioaccumulative and Toxic

(Contd. on page 6)
Trade name: Albumin bovine Fraction V, pH 7.0

vPvB: very Persistent and very Bioaccumulative

* Data compared to the previous version altered.