

## **BCA Protein Assay Macro Kit**

**Article number : 39228**

### **Safety Data Sheets of the following Kit Components:**

|         |  |
|---------|--|
| 39228.A | Reagent A (BCA Solution)                 |
| 39228.B | Reagent B (Copper Sulfate Solution)      |
| 11926   | Albumin bovine Fraction V, Protease-free |

# Safety Data Sheet

acc. to OSHA HCS

Printing date 10/14/2024

Reviewed on 10/14/2024

## 1 Identification

- **Product identifier**
- **Trade name:** Reagent A (BCA Solution)  
for BCA Protein Assay Macro Kit
- **Article number:** 39228.A
- **Application of the substance / the mixture:** Laboratory chemicals
- **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
- **Emergency telephone number:**  
Emergency medical information in case of poisoning  
Poison Information Center Mainz-Tel: +49 (0) 6131 19240  
(Advice in German and English)



## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS08

Sensitization - Respiratory 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

- **Label elements**
- **GHS label elements**  
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:** GHS08
- **Signal word:** Danger
- **Hazard-determining components of labeling:**  
Bicinchoninic acid hydrate disodium salt
- **Hazard statements:**  
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- **Precautionary statements**  
Avoid breathing mist/vapours/spray.  
Wear respiratory protection.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
If experiencing respiratory symptoms: Call a poison center/doctor.  
Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 0  
Fire = 0  
Reactivity = 0

(Contd. on page 2)

US

# Safety Data Sheet

acc. to OSHA HCS

Printing date 10/14/2024

Reviewed on 10/14/2024

**Trade name: Reagent A (BCA Solution)**  
for BCA Protein Assay Macro Kit

(Contd. of page 1)

· **HMIS-ratings (scale 0 - 4)**

HEALTH 0

Health = 0

FIRE 0

Fire = 0

REACTIVITY 0

Reactivity = 0

· **Other hazards**

· **Results of PBT and vPvB assessment:**

· **PBT:** PBT - Assessment not available.

· **vPvB:** vPvB - Assessment not available.

## 3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** aqueous solution

· **Dangerous components:**

|          |  |          |
|----------|--|----------|
| 497-19-8 | sodium carbonate                         | 1-3%     |
| 979-88-4 | Bicinchoninic acid hydrate disodium salt | 0.5-1.5% |

· **Additional information:**

The product does not contain any other substances that have to be declared according to REACH (Regulation (EC) No. 1907/2006).

For the wording of the listed hazard phrases refer to section 16.

## 4 First-aid measures

· **Description of first aid measures**

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

· **After skin contact:**

Wash off immediately with soap and water and rinse thoroughly. In case of complaints, consult a doctor.

· **After eye contact:**

Rinse opened eye for several minutes with running water. Remove existing contact lenses, if possible, and continue rinsing. In case of complaints, consult an ophthalmologist.

· **After swallowing:** Rinse out mouth. In case of complaints, consult a doctor.

· **Most important symptoms and effects, both acute and delayed** No further relevant information available.

· **Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

## 5 Fire-fighting measures

· **Extinguishing media**

· **Suitable extinguishing agents:**

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

· **Special hazards arising from the substance or mixture** No further relevant information available.

· **Advice for firefighters**

· **Protective equipment:** Wear self-contained breathing apparatus.

## 6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**

Wear protective clothing.

Ensure adequate ventilation

Avoid contact with eyes and skin.

· **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

(Contd. on page 3)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 10/14/2024

Reviewed on 10/14/2024

**Trade name: Reagent A (BCA Solution)**  
for BCA Protein Assay Macro Kit

(Contd. of page 2)

- **Methods and material for containment and cleaning up**  
Dispose contaminated material as waste according to section 13.  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **Protective Action Criteria for Chemicals**

|                 |                  |                       |
|-----------------|------------------|-----------------------|
| · <b>PAC-1:</b> |                  |                       |
| 497-19-8        | sodium carbonate | 7.6 mg/m <sup>3</sup> |
| · <b>PAC-2:</b> |                  |                       |
| 497-19-8        | sodium carbonate | 83 mg/m <sup>3</sup>  |
| · <b>PAC-3:</b> |                  |                       |
| 497-19-8        | sodium carbonate | 500 mg/m <sup>3</sup> |

- **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.

## 7 Handling and storage

- **Precautions for safe handling:**  
Ensure good ventilation/exhaustion at the workplace.  
Avoid contact with eyes and skin.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Store only in the original receptacle.  
Storage at +2 to +8 °C
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Store container tightly closed and dry.
- **Specific end use(s):** No further relevant information available.

## 8 Exposure controls/personal protection

- **Control parameters**
- **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.
- **Exposure controls**
- **Additional information about design of technical systems:** No further data; see section 7.
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Keep away from foodstuffs, beverages and feed.  
Store protective clothing separately.  
Immediately remove all soiled and contaminated clothing.  
Avoid contact with the eyes and skin.  
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.

(Contd. on page 4)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 10/14/2024

Reviewed on 10/14/2024

**Trade name: Reagent A (BCA Solution)**  
**for BCA Protein Assay Macro Kit**

(Contd. of page 3)

## Protective gloves

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.

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.

## For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:

Nitrile rubber, NBR

Natural rubber, NR

## Eye protection: Safety glasses

## Body protection: Protective work clothing

## 9 Physical and chemical properties

### Information on basic physical and chemical properties

|  |  |
|--|--|
| General Information:                     | Physical and chemical properties of the component water, CAS no. 7732-18-5 |
| Color:                                   | Colorless  |
| Odor:                                    | No relevant data available   |
| Odor threshold:                          | No information available   |
| Melting point/Melting range:             | 0 °C (32 °F)   |
| Boiling point/Boiling range:             | No information available   |
| Flammability (solid, gaseous):           | No information available   |
| Explosion limits:                        |  |
| Lower:                                   | No information available   |
| Upper:                                   | No information available   |
| Flash point:                             | No information available   |
| Decomposition temperature:               | No information available   |
| pH-value at 20 °C (68 °F):               | 11-11.6  |
| Viscosity:                               |  |
| Kinematic viscosity:                     | No information available   |
| Dynamic viscosity:                       | No information available   |
| Solubility in / Miscibility with:        |  |
| Water:                                   | Fully miscible.  |
| Partition coefficient (n-octanol/water): | No information available   |
| Vapor pressure at 20 °C (68 °F):         | 23 hPa (17.3 mm Hg)  |
| Vapor pressure:                          |  |
| Density at 20 °C (68 °F):                | 1 g/cm <sup>3</sup> (8.345 lbs/gal)  |
| Relative density:                        | No information available   |

### Other information

#### Appearance:

#### Form:

Solution

(Contd. on page 5)

US

# Safety Data Sheet

acc. to OSHA HCS

Printing date 10/14/2024

Reviewed on 10/14/2024

**Trade name: Reagent A (BCA Solution)**  
for BCA Protein Assay Macro Kit

(Contd. of page 4)

- **Important information on protection of health and environment, and on safety:**
- **Danger of explosion:** Product does not present an explosion hazard.
- **VOC %:**
- **VOC content:** 0.00 %
- **Molecular weight:** 18.02 g/mol

\*

## 10 Stability and reactivity

- **Reactivity:** No further relevant information available.
- **Chemical stability:**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** No further relevant information available.
- **Conditions to avoid:** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No further relevant information available.

## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:** Based on available data, the classification criteria are not met.
- **Sensitization:** May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- **Additional toxicological information:**
- **Carcinogenic categories**

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

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

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

None of the ingredients is listed.

## 12 Ecological information

- **Toxicity:**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability:** No further relevant information available.
- **Bioaccumulative potential:** No further relevant information available.
- **Mobility in soil:** No further relevant information available.
- **Results of PBT and vPvB assessment:**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects:**
- **Additional ecological information:**
- **General notes:** Water hazard class 1 (Self-assessment); slightly hazardous for water

## 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**  
Dispose of in accordance with official regulations.

(Contd. on page 6)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 10/14/2024

Reviewed on 10/14/2024

**Trade name: Reagent A (BCA Solution)**  
**for BCA Protein Assay Macro Kit**

(Contd. of page 5)

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

· **Uncleaned packagings:**

· **Recommendation:**

Uncleaned packaging must be disposed of in the same way as the product in accordance with official regulations.

· **Recommended cleansing agent:** Water, if necessary with cleansing agents.

## 14 Transport information

· **UN-Number**

· **DOT, ADR, IMDG, IATA** Void

· **UN proper shipping name**

· **DOT, ADR, IMDG, IATA** Void

· **Transport hazard class(es)**

· **DOT, ADR, IMDG, IATA**

· **Class** Void

· **Label** -

· **Packing group**

· **DOT, ADR, IMDG, IATA** Void

· **Environmental hazards**

· **Marine pollutant:** No

· **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.

## 15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**  
 No further relevant information available.

· **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):**

All components have the value ACTIVE.

· **Hazardous Air Pollutants**

None of the ingredients is listed.

· **Proposition 65**

None of the ingredients is listed.

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

(Contd. on page 7)



# Safety Data Sheet

acc. to OSHA HCS

Printing date 10/14/2024

Reviewed on 10/14/2024

**Trade name: Reagent A (BCA Solution)**  
**for BCA Protein Assay Macro Kit**

(Contd. of page 6)

• **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

• **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

• **Carcinogenicity categories**

• **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

• **TLV (Threshold Limit Value)**

None of the ingredients is listed.

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

None of the ingredients is listed.

• **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

• **Hazard pictograms** GHS08

• **Signal word** Danger

• **Hazard-determining components of labeling:**

Bicinchoninic acid hydrate disodium salt

• **Hazard statements**

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

• **Precautionary statements**

Avoid breathing mist/vapours/spray.

Wear respiratory protection.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If experiencing respiratory symptoms: Call a poison center/doctor.

Dispose of contents/container in accordance with local/regional/national/international regulations.

• **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.

• **Department issuing SDS:** Product Safety Department

• **Contact:** +49 6221 13840-35

• **Date of preparation / last revision** 10/14/2024 / -

• **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

bw: body weight

UFI: Unique Formula Identifier

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

(Contd. on page 8)



**Safety Data Sheet**  
**acc. to OSHA HCS**

Printing date 10/14/2024

Reviewed on 10/14/2024

**Trade name: Reagent A (BCA Solution)**  
**for BCA Protein Assay Macro Kit**

(Contd. of page 7)

*NIOSH: National Institute for Occupational Safety*

*OSHA: Occupational Safety & Health*

*TLV: Threshold Limit Value*

*PEL: Permissible Exposure Limit*

*REL: Recommended Exposure Limit*

*Sensitization - Respiratory 1: Respiratory sensitisation – Category 1*

US

# Safety Data Sheet

acc. to OSHA HCS

Printing date 10/10/2024

Reviewed on 10/10/2024

## 1 Identification

- **Product identifier**
- **Trade name:** Reagent B (Copper Sulfate Solution)  
for BCA Protein Assay Macro Kit
- **Article number:** 39228.B
- **Application of the substance / the mixture:** Laboratory chemicals
- **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
- **Emergency telephone number:**  
Emergency medical information in case of poisoning  
Poison Information Center Mainz-Tel: +49 (0) 6131 19240  
(Advice in German and English)



## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS05

Eye Damage 1 H318 Causes serious eye damage.

- **Label elements**
- **GHS label elements**  
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:** GHS05
- **Signal word:** Danger
- **Hazard-determining components of labeling:**  
copper(II) sulfate, pentahydrate
- **Hazard statements:**  
Causes serious eye damage.
- **Precautionary statements**  
Avoid release to the environment.  
Wear protective gloves/protective clothing/eye protection/face protection.  
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.  
Continue rinsing.  
Immediately call a poison center/doctor.  
Collect spillage.
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 3  
Fire = 0  
Reactivity = 0

(Contd. on page 2)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 10/10/2024

Reviewed on 10/10/2024

**Trade name: Reagent B (Copper Sulfate Solution)**  
for BCA Protein Assay Macro Kit

(Contd. of page 1)

· **HMIS-ratings (scale 0 - 4)**

|            |    |
|------------|----|
| HEALTH     | *3 |
| FIRE       | 0  |
| REACTIVITY | 0  |

Health = \*3

Fire = 0

Reactivity = 0

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

## 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** aqueous solution

· **Dangerous components:**

|           |                                  |        |
|-----------|----------------------------------|--------|
| 7758-99-8 | copper(II) sulfate, pentahydrate | 2.5-7% |
|-----------|----------------------------------|--------|

· **Additional information:**

The product does not contain any other substances that have to be declared according to REACH (Regulation (EC) No. 1907/2006).

For the wording of the listed hazard phrases refer to section 16.

## 4 First-aid measures

- **Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**  
Wash off immediately with soap and water and rinse thoroughly. In case of complaints, consult a doctor.
- **After eye contact:**  
Rinse opened eye for several minutes with running water. Remove existing contact lenses, if possible, and continue rinsing. Consult an ophthalmologist immediately.
- **After swallowing:** Rinse out mouth. Call a doctor immediately.
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

## 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub> extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Wear self-contained breathing apparatus.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective clothing.  
Ensure adequate ventilation
- **Environmental precautions:**  
Do not allow product to reach sewage system or any water course.  
Inform respective authorities in case of seepage into water course or sewage system.

(Contd. on page 3)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 10/10/2024

Reviewed on 10/10/2024

**Trade name: Reagent B (Copper Sulfate Solution)**  
for BCA Protein Assay Macro Kit

(Contd. of page 2)

Do not allow to enter sewers/ surface or ground water.

· **Methods and material for containment and cleaning up**

Dispose contaminated material as waste according to section 13.

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

· **Protective Action Criteria for Chemicals**

· **PAC-1:**

|           |                                  |                      |
|-----------|----------------------------------|----------------------|
| 7758-99-8 | copper(II) sulfate, pentahydrate | 12 mg/m <sup>3</sup> |
|-----------|----------------------------------|----------------------|

· **PAC-2:**

|           |                                  |                      |
|-----------|----------------------------------|----------------------|
| 7758-99-8 | copper(II) sulfate, pentahydrate | 32 mg/m <sup>3</sup> |
|-----------|----------------------------------|----------------------|

· **PAC-3:**

|           |                                  |                       |
|-----------|----------------------------------|-----------------------|
| 7758-99-8 | copper(II) sulfate, pentahydrate | 190 mg/m <sup>3</sup> |
|-----------|----------------------------------|-----------------------|

· **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.

## 7 Handling and storage

· **Precautions for safe handling:** Ensure good ventilation/exhaustion at the workplace.

· **Information about protection against explosions and fires:** No special measures required.

· **Conditions for safe storage, including any incompatibilities**

· **Storage:**

· **Requirements to be met by storerooms and receptacles:**

Store only in the original receptacle.

Storage at +2 to +8 °C

· **Information about storage in one common storage facility:** Not required.

· **Further information about storage conditions:** Store container tightly closed and dry.

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

## 8 Exposure controls/personal protection

· **Control parameters**

· **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.

· **Exposure controls**

· **Additional information about design of technical systems:** No further data; see section 7.

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Store protective clothing separately.

Immediately remove all soiled and contaminated clothing.

Avoid contact with the eyes and skin.

Wash hands before breaks and at the end of work.

· **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

(Contd. on page 4)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 10/10/2024

Reviewed on 10/10/2024

**Trade name: Reagent B (Copper Sulfate Solution)**  
**for BCA Protein Assay Macro Kit**

(Contd. of page 3)

· **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.

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.

· **For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:**

Nitrile rubber, NBR

Natural rubber, NR

· **Eye protection:** Tightly sealed goggles

· **Body protection:** Protective work clothing

## 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information:**

Physical and chemical properties of the component water, CAS no. 7732-18-5

· **Color:**

Light blue

· **Odor:**

No relevant data available

· **Odor threshold:**

No information available

· **Melting point/Melting range:**

0 °C (32 °F)

· **Boiling point/Boiling range:**

No information available

· **Flammability (solid, gaseous):**

Not applicable.

· **Explosion limits:**

· **Lower:**

No information available

· **Upper:**

No information available

· **Flash point:**

Not applicable.

· **Decomposition temperature:**

No information available

· **pH-value:**

No information available

· **Viscosity:**

· **Kinematic viscosity:**

No information available

· **Dynamic viscosity:**

No information available

· **Solubility in / Miscibility with:**

· **Water:**

Fully miscible.

· **Partition coefficient (n-octanol/water):**

No information available

· **Vapor pressure at 20 °C (68 °F):**

23 hPa (17.3 mm Hg)

· **Vapor pressure:**

· **Density at 20 °C (68 °F):**

1 g/cm<sup>3</sup> (8.345 lbs/gal)

· **Relative density:**

No information available

· **Other information**

· **Appearance:**

· **Form:**

Solution

· **Important information on protection of health and environment, and on safety:**

· **Danger of explosion:**

Product does not present an explosion hazard.

· **VOC %:**

· **VOC content:**

0.00 %

(Contd. on page 5)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 10/10/2024

Reviewed on 10/10/2024

**Trade name: Reagent B (Copper Sulfate Solution)**  
for BCA Protein Assay Macro Kit

(Contd. of page 4)

· **Molecular weight** 18.02 g/mol

## 10 Stability and reactivity

- **Reactivity:** No further relevant information available.
- **Chemical stability:**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** No further relevant information available.
- **Conditions to avoid:** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No further relevant information available.

## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:** Based on available data, the classification criteria are not met.
- **on the eye:** Causes serious eye damage.
- **Additional toxicological information:**
- **Carcinogenic categories**

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

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

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

None of the ingredients is listed.

## 12 Ecological information

- **Toxicity:**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability:** No further relevant information available.
- **Bioaccumulative potential:** No further relevant information available.
- **Mobility in soil:** No further relevant information available.
- **Results of PBT and vPvB assessment:**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects:**
- **Additional ecological information:**
- **General notes:**
- Do not allow product to reach ground water, water course or sewage system.
- Water hazard class 2 (Self-assessment): hazardous for water

## 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
- Dispose of in accordance with official regulations.
- Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

(Contd. on page 6)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 10/10/2024

Reviewed on 10/10/2024

**Trade name: Reagent B (Copper Sulfate Solution)**  
**for BCA Protein Assay Macro Kit**

(Contd. of page 5)

- **Uncleaned packagings:**
- **Recommendation:**  
 Uncleaned packaging must be disposed of in the same way as the product in accordance with official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

## 14 Transport information

- |   |  |
|---|--|
| · <b>UN-Number</b>  | UN3082   |
| · <b>DOT, ADR, IMDG, IATA</b>   |  |
| · <b>UN proper shipping name</b>  | Environmentally hazardous substance, liquid, n.o.s. (copper(II) sulfate, pentahydrate)                   |
| · <b>DOT</b>  |  |
| · <b>ADR</b>  | 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (copper(II) sulfate, pentahydrate)              |
| · <b>IMDG</b>   | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (copper(II) sulfate, pentahydrate), MARINE POLLUTANT |
| · <b>IATA</b>   | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (copper(II) sulfate, pentahydrate)                   |
| · <b>Transport hazard class(es)</b>   |  |
| · <b>DOT, ADR, IMDG, IATA</b>   |  |
|   |  |
| · <b>Class</b>  | 9 Miscellaneous dangerous substances and articles  |
| · <b>Label</b>  | 9  |
| · <b>Packing group</b>  |  |
| · <b>DOT, ADR, IMDG, IATA</b>   | III  |
| · <b>Environmental hazards</b>  |  |
| · <b>Marine pollutant:</b>  | No<br>Yes (DOT)  |
| · <b>Special marking (ADR):</b>   | Symbol (fish and tree)   |
| · <b>Special marking (IATA):</b>  | Symbol (fish and tree)   |
| · <b>Special precautions for user</b>   | Warning: Miscellaneous dangerous substances and articles   |
| · <b>Hazard identification number (Kemler code):</b>  | 90   |
| · <b>EMS Number:</b>  | F-A,S-F  |
| · <b>Stowage Category</b>   | A  |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>  | Not applicable.  |
| · <b>Transport/Additional information:</b>  | Not dangerous according to the above specifications.   |
| · <b>DOT</b>  |  |
| · <b>Remarks:</b>   | Special marking with the symbol (fish and tree).   |

(Contd. on page 7)



# Safety Data Sheet

acc. to OSHA HCS

Printing date 10/10/2024

Reviewed on 10/10/2024

**Trade name: Reagent B (Copper Sulfate Solution)**  
for BCA Protein Assay Macro Kit

(Contd. of page 6)

|                                   |  |
|-----------------------------------|--|
| · <b>ADR</b>                      |  |
| · <b>Excepted quantities (EQ)</b> | Code: E1<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 1000 ml |
| · <b>IMDG</b>                     |  |
| · <b>Limited quantities (LQ)</b>  | 5L   |
| · <b>Excepted quantities (EQ)</b> | Code: E1<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 1000 ml |
| · <b>UN "Model Regulation":</b>   | UN 3082 ENVIRONMENTALLY HAZARDOUS<br>SUBSTANCE, LIQUID, N.O.S. (COPPER(II) SULFATE,<br>PENTAHYDRATE), 9, III     |

## 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**  
No further relevant information available.

· **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):**

7732-18-5 | water, distilled, conductivity or of similar purity

ACTIVE

· **Hazardous Air Pollutants**

None of the ingredients is listed.

· **Proposition 65**

None of the ingredients is listed.

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenicity categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value)**

None of the ingredients is listed.

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

None of the ingredients is listed.

· **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms GHS05**

· **Signal word Danger**

(Contd. on page 8)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 10/10/2024

Reviewed on 10/10/2024

**Trade name: Reagent B (Copper Sulfate Solution)  
for BCA Protein Assay Macro Kit**

(Contd. of page 7)

- **Hazard-determining components of labeling:**  
copper(II) sulfate, pentahydrate
- **Hazard statements**  
Causes serious eye damage.
- **Precautionary statements**  
Avoid release to the environment.  
Wear protective gloves/protective clothing/eye protection/face protection.  
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.  
Continue rinsing.  
Immediately call a poison center/doctor.  
Collect spillage.
- **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.

- **Department issuing SDS:** Product Safety Department
- **Contact:** +49 6221 13840-35
- **Date of preparation / last revision** 10/10/2024 / -
- **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  
 bw: body weight  
 UFI: Unique Formula Identifier  
 ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)  
 IMDG: International Maritime Code for Dangerous Goods  
 DOT: US Department of Transportation  
 IATA: International Air Transport Association  
 EINECS: European Inventory of Existing Commercial Chemical Substances  
 ELINCS: European List of Notified Chemical Substances  
 CAS: Chemical Abstracts Service (division of the American Chemical Society)  
 NFPA: National Fire Protection Association (USA)  
 HMIS: Hazardous Materials Identification System (USA)  
 VOC: Volatile Organic Compounds (USA, EU)  
 PBT: Persistent, Bioaccumulative and Toxic  
 vPvB: very Persistent and very Bioaccumulative  
 NIOSH: National Institute for Occupational Safety  
 OSHA: Occupational Safety & Health  
 TLV: Threshold Limit Value  
 PEL: Permissible Exposure Limit  
 REL: Recommended Exposure Limit  
 Eye Damage 1: Serious eye damage/eye irritation – Category 1

US

# Safety Data Sheet

acc. to OSHA HCS

Printing date 10/14/2024

Reviewed on 10/14/2024

## 1 Identification

- **Product identifier**
- **Trade name:** Albumin bovine Fraction V, Protease-free
- **Article number:** 11926
- **CAS Number:**  
9048-46-8
- **EC number:**  
232-936-2
- **Application of the substance / the mixture:** Laboratory chemicals
- **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
- **Emergency telephone number:**  
Emergency medical information in case of poisoning  
Poison Information Center Mainz-Tel: +49 (0) 6131 19240  
(Advice in German and English)



## 2 Hazard(s) identification

- **Classification of the substance or mixture**  
The substance is not classified, according to the Globally Harmonized System (GHS).

- **Label elements**
- **GHS label elements:** Void
- **Hazard pictograms:** Void
- **Signal word:** Void
- **Hazard statements:** Void
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**



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

-US

(Contd. on page 2)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 10/14/2024

Reviewed on 10/14/2024

Trade name: Albumin bovine Fraction V, Protease-free

(Contd. of page 1)

## 3 Composition/information on ingredients

- **Chemical characterization: Substances**
- **CAS No. Description:**  
9048-46-8 Albumins, blood serum
- **Identification number(s):**
- **EC number:** 232-936-2
- **Description:**
- **MW:** ca. 67000

## 4 First-aid measures

- **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:**  
Wash off immediately with soap and water and rinse thoroughly. In case of complaints, consult a doctor.
- **After eye contact:**  
Rinse opened eye for several minutes with running water. Remove existing contact lenses, if possible, and continue rinsing. In case of complaints, consult an ophthalmologist.
- **After swallowing:**  
Rinse out mouth. Drink plenty of water and provide fresh air. Consult a doctor in case of complaints.
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

## 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub> extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture**  
Formation of hazardous vapors and gases possible during heating or in case of fire.  
In case of fire, the following can be released:  
Carbon monoxide and carbon dioxide
- **Advice for firefighters**
- **Protective equipment:** Wear self-contained breathing apparatus.
- **Additional information**  
Collect contaminated fire fighting water separately. It must not enter the sewage system.  
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective clothing.  
Ensure adequate ventilation  
Do not inhale dusts.  
Avoid contact with eyes and skin.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up**  
Dispose contaminated material as waste according to section 13.  
Pick up mechanically.
- **Protective Action Criteria for Chemicals**
- **PAC-1:** Substance is not listed.
- **PAC-2:** Substance is not listed.

(Contd. on page 3)

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 10/14/2024

Reviewed on 10/14/2024

**Trade name: Albumin bovine Fraction V, Protease-free**

(Contd. of page 2)

- **PAC-3:** Substance is not listed.
- **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.

### 7 Handling and storage

- **Precautions for safe handling:**  
 Ensure good ventilation/exhaustion at the workplace.  
 No special measures required.  
 Prevent formation of dust.
- **Information about protection against explosions and fires:** Keep ignition sources away - Do not smoke.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
 Storage at +2 to +8 °C  
 Store only in the original receptacle.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**  
 Store container tightly closed and dry.  
 Protect from exposure to the light.
- **Specific end use(s):** No further relevant information available.

### 8 Exposure controls/personal protection

- **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.
- **Exposure controls**
- **Additional information about design of technical systems:** No further data; see section 7.
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
 Keep away from foodstuffs, beverages and feed.  
 Store protective clothing separately.  
 Immediately remove all soiled and contaminated clothing.  
 Avoid contact with the eyes and skin.  
 Wash hands before breaks and at the end of work.
- **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 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:**  
 Nitrile rubber, NBR  
 Chloroprene rubber, CR

(Contd. on page 4)

US

# Safety Data Sheet

acc. to OSHA HCS

Printing date 10/14/2024

Reviewed on 10/14/2024

Trade name: Albumin bovine Fraction V, Protease-free

(Contd. of page 3)

- **Eye protection:** Safety glasses
- **Body protection:** Protective work clothing

## 9 Physical and chemical properties

### · Information on basic physical and chemical properties

#### · General Information:

- **Color:** oyster white
- **Odor:** No relevant data available
- **Odor threshold:** not determined.
- **Melting point/Melting range:** No information available
- **Boiling point/Boiling range:** No information available
- **Flammability (solid, gaseous):** No information available
- **Explosion limits:**
- **Lower:** No information available
- **Upper:** No information available
- **Flash point:** No information available
- **Decomposition temperature:** No information available
- **pH-value:** 6.8-7.2
- **Viscosity:**
- **Kinematic viscosity:** No information available
- **Dynamic viscosity:** No information available
- **Solubility in / Miscibility with:**
- **Water:** Soluble.
- **Partition coefficient (n-octanol/water):** No information available
- **Vapor pressure:** No information available
- **Vapor pressure:**
- **Density:** No information available
- **Relative density:** No information available

### · Other information

- **Appearance:**
- **Form:** lyophilisate
- **Important information on protection of health and environment, and on safety:**
- **Danger of explosion:** The product is not explosive, but the formation of explosive dust/air mixtures is possible.
- **Molecular weight** ~67,000 g/mol

## 10 Stability and reactivity

- **Reactivity:** No further relevant information available.
- **Chemical stability:**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions:**  
As the product is supplied it is not capable of dust explosion; however enrichment with fine dust causes risk of dust explosion.
- **Conditions to avoid:**  
High temperatures  
Exposure to light
- **Incompatible materials:** Avoid contact with strong oxidizing agents.
- **Hazardous decomposition products:** In case of fire: see section 5

US

(Contd. on page 5)

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 10/14/2024

Reviewed on 10/14/2024

Trade name: Albumin bovine Fraction V, Protease-free

(Contd. of page 4)

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:** Based on available data, the classification criteria are not met.
- **on the skin:** Based on available data, the classification criteria are not met.
- **on the eye:** Based on available data, the classification criteria are not met.
- **Sensitization:** Based on available data, the classification criteria are not met.
- **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.
- **Specific target organ toxicity - single exposure:**  
Based on available data, the classification criteria are not met.
- **Specific target organ toxicity - repeated exposure:**  
Based on available data, the classification criteria are not met.
- **Aspiration hazard:** Based on available data, the classification criteria are not met.
- **Additional toxicological information:**
- **Carcinogenic categories**
- **IARC (International Agency for Research on Cancer)** Substance is not listed.
- **NTP (National Toxicology Program)** Substance is not listed.
- **OSHA-Ca (Occupational Safety & Health Administration)** Substance is not listed.

### 12 Ecological information

- **Toxicity:**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability:** No further relevant information available.
- **Bioaccumulative potential:** No further relevant information available.
- **Mobility in soil:** No further relevant information available.
- **Results of PBT and vPvB assessment:**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects:**
- **Additional ecological information:**
- **General notes:**  
Do not allow product to reach ground water, water course or sewage system.  
Water hazard class 1 (Self-assessment): slightly hazardous for water

### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:** Dispose of in accordance with official regulations.
- **Uncleaned packagings:**
- **Recommendation:**  
Uncleaned packaging must be disposed of in the same way as the product in accordance with official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

### 14 Transport information

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

(Contd. on page 6)



# Safety Data Sheet

acc. to OSHA HCS

Printing date 10/14/2024

Reviewed on 10/14/2024

Trade name: Albumin bovine Fraction V, Protease-free

(Contd. of page 5)

|  |  |
|--|--|
| · <b>UN proper shipping name</b>   |  |
| · <b>DOT, ADR, ADN, IMDG, IATA</b>   | Void   |
| · <b>Transport hazard class(es)</b>  |  |
| · <b>DOT, ADR, ADN, IMDG, IATA</b>   |  |
| · <b>Class</b>   | Void   |
| · <b>Packing group</b>   |  |
| · <b>DOT, ADR, IMDG, IATA</b>  | Void   |
| · <b>Environmental hazards</b>   |  |
| · <b>Marine pollutant:</b>   | No   |
| · <b>Special precautions for user</b>  | Not applicable.                                      |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable.                                      |
| · <b>Transport/Additional information:</b>                                       | Not dangerous according to the above specifications. |
| · <b>UN "Model Regulation":</b>  | Void   |

## 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**  
No further relevant information available.
- **Section 355 (extremely hazardous substances):** Substance is not listed.
- **Section 313 (Specific toxic chemical listings):** Substance is not listed.
- **TSCA (Toxic Substances Control Act):** ACTIVE
- **Hazardous Air Pollutants** Substance is not listed.
- **Proposition 65** Substance is not listed.
- **Chemicals known to cause cancer:** Substance is not listed.
- **Chemicals known to cause reproductive toxicity for females:** Substance is not listed.
- **Chemicals known to cause reproductive toxicity for males:** Substance is not listed.
- **Chemicals known to cause developmental toxicity:** Substance is not listed.
- **Carcinogenicity categories**
- **EPA (Environmental Protection Agency)** Substance is not listed.
- **TLV (Threshold Limit Value)** Substance is not listed.
- **NIOSH-Ca (National Institute for Occupational Safety and Health)** Substance is not listed.
- **GHS label elements** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **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.

- **Department issuing SDS:** Product Safety Department
- **Contact:** +49 6221 13840-35
- **Date of preparation / last revision** 10/14/2024 / -
- **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)

(Contd. on page 7)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 10/14/2024

Reviewed on 10/14/2024

**Trade name: Albumin bovine Fraction V, Protease-free**

(Contd. of page 6)

*REACH: Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals**CLP: Regulation on classification, labelling and packaging of substances and mixtures**bw: body weight**ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)**IMDG: International Maritime Code for Dangerous Goods**DOT: US Department of Transportation**IATA: International Air Transport Association**EINECS: European Inventory of Existing Commercial Chemical Substances**CAS: Chemical Abstracts Service (division of the American Chemical Society)**NFPA: National Fire Protection Association (USA)**HMIS: Hazardous Materials Identification System (USA)**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**NIOSH: National Institute for Occupational Safety**OSHA: Occupational Safety & Health**TLV: Threshold Limit Value**PEL: Permissible Exposure Limit**REL: Recommended Exposure Limit*

US