

## Protein in Tris Buffer

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

#### 1.1. Product identifier

Product name:	Protein in Tris Buffer
Article number:	AGX-5-000-0197 <i>Borrelia afzelii</i> OspA AGX-5-000-0376 <i>Borrelia afzelii</i> DbpA AGX-5-000-0379 <i>Borrelia afzelii</i> p39 AGX-5-000-0389 <i>Borrelia garinii</i> p58 AGX-5-000-0391 <i>Borrelia afzelii</i> VlsE AGX-5-000-0477 <i>Borrelia burgdorferi</i> DbpA AGX-5-000-0492 <i>Borrelia afzelii</i> p83/100 AGX-5-000-0499 <i>Borrelia garinii</i> subsp. <i>bavariensis</i> DbpA AGX-5-000-0568 Human Astrovirus-1 capsid AGX-5-000-0703 Human Parvovirus VP1-s AGX-5-000-0882 <i>Clostridium perfringens</i> CPE (C-term) AGX-5-000-0947 Epstein-Barr-Virus EA-p54 Fragment AGX-5-000-0959 Epstein-Barr-Virus EBNA-1 (C-term)
REACH Registration Number:	not applicable

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

##### Use of the substance/mixture

For research use and further manufacturing.  
Restricted to professional users.

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

Company name:	Seramun Diagnostica GmbH
Street:	Spreehagener Str. 1
Place:	D-15754 Heidesee
Telephone:	+49 33767 791-10
E-mail:	quality@seramun.com

**1.4. Emergency telephone number:** +49 33767 791-10 from 9:00 am to 3:00 pm CET, excluding weekends and public holidays

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Regulation (EC) No 1272/2008

This mixture is not classified as hazardous in accordance with Regulation (EC) No 1272/2008.

#### 2.2. Label elements

-  
Labelling of packages where the contents do not exceed 125 ml  
-

#### 2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

##### Hazardous components

none (according to Regulation (EC) No 1907/2006 (REACH))

## Protein in Tris Buffer

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### General information

When in doubt or if symptoms are observed, get medical advice.

##### After inhalation

Provide fresh air.

##### After contact with skin

Wash with plenty of water.

##### After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water.

Remove contact lenses, if present and easy to do. Continue rinsing.

##### After ingestion

Rinse mouth thoroughly with water.

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

No information available.

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

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

##### Suitable extinguishing media

Foam

Dry extinguishing powder

Carbon dioxide (CO<sub>2</sub>)

##### Unsuitable extinguishing media

Full water jet

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

In case of fire may be liberated:

Carbon monoxide

Carbon dioxide (CO<sub>2</sub>)

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

#### 5.3. Advice for firefighters

Co-ordinate fire-fighting measures to the fire surroundings.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### General advice

Use personal protection equipment.

##### For non-emergency personnel

Wear personal protection equipment (refer to section 8).

##### For emergency responders

Use personal protective equipment as required.

#### 6.2. Environmental precautions

No special environmental measures are necessary.

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

##### For containment

Take up mechanically.

## Protein in Tris Buffer

### For cleaning up

Wipe up with absorbent material (eg. cloth, fleece).

### 6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### Advice on safe handling

Observe instructions for use.

#### Advice on protection against fire and explosion

No special fire protection measures are necessary.

#### Advice on general occupational hygiene

When using do not eat, drink, smoke, sniff.

Wash hands before breaks and after work.

Take off contaminated clothing.

### 7.2. Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

Keep container tightly closed.

Keep cool.

Keep/Store only in original container.

Never return spills in original containers for re-use.

#### Hints on joint storage

Keep away from: Food and feedingstuffs

#### Further information on storage conditions

storage temperature at  $\leq -70$  °C .

### 7.3. Specific end use(s)

For research use and further manufacturing.

Restricted to professional users.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Additional advice on limit values

To date, no national critical limit values exist.

### 8.2. Exposure controls

#### Individual protection measures, such as personal protective equipment

##### Eye/face protection

Eye protection: not required.

##### Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Suitable material: NBR (Nitrile rubber)

Thickness of the glove material  $\geq 0.1$  mm

Breakthrough time:  $> 480$  min

Take recovery periods for skin regeneration.

**Protein in Tris Buffer**

**Skin protection**

Use of protective clothing.

**Respiratory protection**

Usually no personal respirative protection necessary.

**Thermal hazards**

No special handling advices are necessary.

**Environmental exposure controls**

No special environmental measures are necessary.

**SECTION 9: Physical and chemical properties**

**9.1. Information on basic physical and chemical properties**

Physical state:	Liquid
Colour:	colourless
Odour:	odourless

**Test method**

**Changes in the physical state**

Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	100 °C Calculation method.
Flash point:	380 °C Calculated flash point.

**Flammability**

Solid/liquid: not determined

**Explosive properties**

The product is not: Explosive.

Lower explosion limits:	not determined
Upper explosion limits:	not determined
Auto-ignition temperature:	not determined
Decomposition temperature:	not determined
pH-Value (at 20 °C):	8.0 Experimental data
Viscosity / kinematic:	not determined
Water solubility: (at 20 °C)	not determined

**Solubility in other solvents**

not determined

Partition coefficient n-octanol/water:	not applicable
Vapour pressure: (at 20 °C)	not determined
Vapour pressure: (at 50 °C)	not determined
Density (at 20 °C):	not determined
Relative vapour density:	not determined
Particle characteristics:	not applicable

**9.2. Other information**

**Information with regard to physical hazard classes**

Oxidizing properties

The product is not: oxidising.

**Other safety characteristics**

### Protein in Tris Buffer

Solid content: not determined

#### Further Information

No known hazardous decomposition products.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

### 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

### 10.3. Possibility of hazardous reactions

No known hazardous reactions.

### 10.4. Conditions to avoid

Keep away from heat.

### 10.5. Incompatible materials

No information available.

### 10.6. Hazardous decomposition products

No known hazardous decomposition products.

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Acute toxicity

Based on available data, the classification criteria are not met.

#### ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

#### Irritation and corrosivity

Based on available data, the classification criteria are not met.

#### Sensitising effects

Based on available data, the classification criteria are not met.

#### Carcinogenic/mutagenic/toxic effects for reproduction

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.

#### Information on likely routes of exposure

No information available.

#### Additional information on tests

There are no data available on the preparation/mixture itself.

### 11.2. Information on other hazards

#### Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

#### Further information

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

**Protein in Tris Buffer**

**SECTION 12: Ecological information**

**12.1. Toxicity**

The product is not: Ecotoxic.

**12.2. Persistence and degradability**

The single components are biodegradable.

**12.3. Bioaccumulative potential**

No indication of bioaccumulation potential.

**12.4. Mobility in soil**

The product has not been tested.

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

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

**12.6. Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

**12.7. Other adverse effects**

No information available.

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

**Disposal recommendations**

Dispose of waste according to applicable legislation.

**List of Wastes Code - residues/unused products**

160509 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08

**List of Wastes Code - used product**

160509 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08

**List of Wastes Code - contaminated packaging**

150102 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); plastic packaging

**Contaminated packaging**

Non-contaminated packages may be recycled.

**SECTION 14: Transport information**

**Land transport (ADR/RID)**

- |  |  |
|--|--|
| <b>14.1. UN number or ID number:</b>     | No dangerous good in sense of this transport regulation. |
| <b>14.2. UN proper shipping name:</b>    | No dangerous good in sense of this transport regulation. |
| <b>14.3. Transport hazard class(es):</b> | No dangerous good in sense of this transport regulation. |
| <b>14.4. Packing group:</b>              | No dangerous good in sense of this transport regulation. |

**Inland waterways transport (ADN)**

- |  |  |
|--|--|
| <b>14.1. UN number or ID number:</b>     | No dangerous good in sense of this transport regulation. |
| <b>14.2. UN proper shipping name:</b>    | No dangerous good in sense of this transport regulation. |
| <b>14.3. Transport hazard class(es):</b> | No dangerous good in sense of this transport regulation. |
| <b>14.4. Packing group:</b>              | No dangerous good in sense of this transport regulation. |

**Marine transport (IMDG)**

**Protein in Tris Buffer**

<b>14.1. UN number or ID number:</b>	No dangerous good in sense of this transport regulation.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.

**Air transport (ICAO-TI/IATA-DGR)**

<b>14.1. UN number or ID number:</b>	No dangerous good in sense of this transport regulation.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**14.6. Special precautions for user**

No dangerous good in sense of this transport regulation.

**14.7. Maritime transport in bulk according to IMO instruments**

No dangerous good in sense of this transport regulation.

**SECTION 15: Regulatory information**

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

**EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 75

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

**National regulatory information**

Water hazard class (D): -- non-hazardous to water

**15.2. Chemical safety assessment**

Chemical safety assessments for substances in this mixture were not carried out.

**SECTION 16: Other information**

**Changes**

This data sheet contains changes from the previous version in section(s): 1,9.

**Abbreviations and acronyms**

CLP: Classification, labelling and Packaging  
 REACH: Registration, Evaluation and Authorization of Chemicals  
 GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals  
 UN: United Nations  
 CAS: Chemical Abstracts Service  
 DNEL: Derived No Effect Level  
 DMEL: Derived Minimal Effect Level  
 PNEC: Predicted No Effect Concentration  
 ATE: Acute toxicity estimate  
 LC50: Lethal concentration, 50%  
 LD50: Lethal dose, 50%  
 LL50: Lethal loading, 50%  
 EL50: Effect loading, 50%  
 EC50: Effective Concentration 50%  
 ErC50: Effective Concentration 50%, growth rate  
 NOEC: No Observed Effect Concentration  
 BCF: Bio-concentration factor  
 PBT: persistent, bioaccumulative, toxic

### Protein in Tris Buffer

vPvB: very persistent, very bioaccumulative  
ADR: Accord européen sur le transport des marchandises dangereuses par Route  
(European Agreement concerning the International Carriage of Dangerous Goods by Road)  
RID: Regulations concerning the international carriage of dangerous goods by rail  
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
(Accord européen relatif au transport international des marchandises dangereuses par voies de navigation  
intérieures)  
IMDG: International Maritime Code for Dangerous Goods  
EmS: Emergency Schedules  
MFAG: Medical First Aid Guide  
IATA: International Air Transport Association  
ICAO: International Civil Aviation Organization  
MARPOL: International Convention for the Prevention of Marine Pollution from Ships  
IBC: Intermediate Bulk Container  
SVHC: Substance of Very High Concern  
For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety  
assessment, chapter R.20 (Table of terms and abbreviations).

#### Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*