

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

**Revision date:** 5 Jun 2023

**Print date:** 3 Aug 2023

**Version:** 1

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## Borrelia afzelii PKo OspC Antigen - BA121R02

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

#### 1.1. Product identifier

**Trade name/designation:**

Borrelia afzelii PKo OspC Antigen - BA121R02

**Article No.:**

BA121R02

**UFI:**

5V9N-M5YX-FDGE-JREH

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

**Use of the substance/mixture:**

The product is intended for professional use.

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

**Supplier (manufacturer/importer/only representative/downstream user/distributor):**

**Institut Virion\Serion GmbH**

Productmanagement

Friedrich-Bergius-Ring 19

97076 Würzburg

Germany

**Telephone:** +49 931 3045 0

**Telefax:** +49 931 3045 100

**E-mail:** product.safety@virion-serion.de

**Website:** www.virion-serion.de

#### 1.4. Emergency telephone number

No data available

### SECTION 2: Hazards identification

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

**Classification according to Regulation (EC) No 1272/2008 [CLP]**

| Hazard classes and hazard categories                              | Hazard statements  | Classification procedure |
|---|--|--------------------------|
| Acute toxicity (oral) ( <i>Acute Tox. 4</i> )                     | H302: Harmful if swallowed.                              |                          |
| Skin corrosion/irritation ( <i>Skin Irrit. 2</i> )                | H315: Causes skin irritation.                            |                          |
| Serious eye damage/eye irritation ( <i>Eye Irrit. 2</i> )         | H319: Causes serious eye irritation.                     |                          |
| Hazardous to the aquatic environment ( <i>Aquatic Chronic 3</i> ) | H412: Harmful to aquatic life with long lasting effects. |                          |

#### 2.2. Label elements

**Labelling according to Regulation (EC) No. 1272/2008 [CLP]**

**Hazard pictograms:**



**GHS07**

Exclamation mark

**Signal word:** Warning

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### Hazard components for labelling:

guanidinium chloride

#### Hazard statements for health hazards

|      |                                |
|------|--------------------------------|
| H302 | Harmful if swallowed.          |
| H315 | Causes skin irritation.        |
| H319 | Causes serious eye irritation. |

#### Hazard statements for environmental hazards

|      |  |
|------|--|
| H412 | Harmful to aquatic life with long lasting effects. |
|------|--|

### Supplemental hazard information: none

#### Precautionary statements Prevention

|      |   |
|------|---|
| P270 | Do not eat, drink or smoke when using this product.                 |
| P273 | Avoid release to the environment.                                   |
| P280 | Wear protective gloves/protective clothing and eye/face protection. |

#### Precautionary statements Response

|             |  |
|-------------|--|
| P302 + P352 | IF ON SKIN: Wash with plenty of soap and water.          |
| P332 + P313 | If skin irritation occurs: Get medical advice/attention. |


### 2.3. Other hazards

No data available

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### Hazardous ingredients / Hazardous impurities / Stabilisers:

| Product identifiers   | Substance name<br>Classification according to Regulation (EC) No 1272/2008 [CLP]   | Concentration         |
|---|--|-----------------------|
| CAS No.: 50-01-1<br>EC No.: 200-002-3<br>Index No.: 607-148-00-0<br>REACH No.:<br>01-2119977063-35-XXXX | <b>guanidinium chloride</b><br>Acute Tox. 4 (H302), Eye Irrit. 2 (H319), Skin Irrit. 2 (H315)<br> Warning | 22 - ≤ 50<br>weight-% |

Full text of H- and EUH-phrases: see section 16.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information:

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove victim out of the danger area. Remove contaminated, saturated clothing. If unconscious but breathing normally, place in recovery position and seek medical advice. Do not leave affected person unattended.

#### Following inhalation:

Provide fresh air. In case of respiratory tract irritation, consult a physician.

#### In case of skin contact:

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.

#### After eye contact:

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

#### Following ingestion:

Rinse mouth. Let 1 glass of water be drunken in little sips (dilution effect). Get medical advice/attention if you feel unwell.

#### Self-protection of the first aider:

Use personal protection equipment. No direct artificial respiration to be given by first aider.

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

Skin corrosion/irritation. Serious eye damage/eye irritation.

### 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:

Water, Foam, alcohol resistant foam, Dry extinguishing powder, ABC-powder

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

#### Hazardous combustion products:

In case of fire: Gases/vapours, toxic

### 5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

### 5.4. Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

## SECTION 6: Accidental release measures

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

#### 6.1.1. For non-emergency personnel

##### Personal precautions:

Remove persons to safety.

##### Protective equipment:

Wear protective gloves/protective clothing/eye protection/face protection.

#### 6.1.2. For emergency responders

##### Personal protection equipment:

Personal protection equipment: see section 8

### 6.2. Environmental precautions

Do not allow to enter into surface water or drains.

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

#### For containment:

Collect spillage. Measures to prevent aerosol and dust generation Wet clean or vacuum up solids.

#### For cleaning up:

Water (with cleaning agent)

### 6.4. Reference to other sections

Safe handling: see section 7. Personal protection equipment: see section 8. Disposal: see section 13.

### 6.5. Additional information

Use appropriate container to avoid environmental contamination.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### Protective measures

##### Advices on safe handling:

Wear personal protection equipment (refer to section 8).

##### Measures to prevent aerosol and dust generation:

Dust should be exhausted directly at the point of origin.

##### Advices on general occupational hygiene

When using do not eat, drink, smoke, sniff. Avoid contact with skin, eyes and clothes.

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

#### Technical measures and storage conditions:

Keep container tightly closed in a cool, well-ventilated place.

**Storage class (TRGS 510, Germany):** 10 - Combustible liquids that cannot be assigned to any of the above storage classes

### 7.3. Specific end use(s)

No data available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No data available

### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

No data available

#### 8.2.2. Personal protection equipment

##### Eye/face protection:

Eye glasses with side protection: EN 166

##### Skin protection:

Tested protective gloves must be worn: EN ISO 374. Suitable material: NBR (Nitrile rubber). Breakthrough time: 480 min. In the case of wanting to use the gloves again, clean them before taking off and air them well.

##### Respiratory protection:

Particle filter device (EN 143). Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190).

#### 8.2.3. Environmental exposure controls

No data available

## SECTION 9: Physical and chemical properties

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

#### Appearance

**Physical state:** Liquid

**Colour:** not determined

**Odour:** not determined

#### Safety relevant basis data

| Parameter                                    | Value          | at °C | ① Method<br>② Remark |
|--|----------------|-------|----------------------|
| pH   | = 7.4          | 20 °C |                      |
| Melting point                                | not determined |       |                      |
| Freezing point                               | not determined |       |                      |
| Initial boiling point and boiling range      | not determined |       |                      |
| Decomposition temperature                    | not determined |       |                      |
| Flash point                                  | not determined |       |                      |
| Evaporation rate                             | not determined |       |                      |
| Auto-ignition temperature                    | not determined |       |                      |
| Upper/lower flammability or explosive limits | not determined |       |                      |
| Vapour pressure                              | not determined |       |                      |
| Vapour density                               | not determined |       |                      |
| Density                                      | not determined |       |                      |
| Relative density                             | not determined |       |                      |
| Bulk density                                 | not determined |       |                      |
| Water solubility                             | not determined |       |                      |

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| Parameter                              | Value          | at °C | ① Method<br>② Remark |
|--|----------------|-------|----------------------|
| Partition coefficient: n-octanol/water | not determined |       |                      |
| Dynamic viscosity                      | not determined |       |                      |
| Kinematic viscosity                    | not determined |       |                      |

### 9.2. Other information

No data available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No data available

### 10.2. Chemical stability

No data available

### 10.3. Possibility of hazardous reactions

No data available

### 10.4. Conditions to avoid

No data available

### 10.5. Incompatible materials

No data available

### 10.6. Hazardous decomposition products

No data available

## SECTION 11: Toxicological information

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

**guanidinium chloride** CAS No.: 50-01-1 EC No.: 200-002-3

**LD<sub>50</sub> oral:** 556.5 mg/kg (Rat)

**LD<sub>50</sub> dermal:** >2,000 mg/kg (Rabbit)

**LC<sub>50</sub> Acute inhalation toxicity (dust/mist):** 3.181 mg/L 4 h (Rat)

#### Acute oral toxicity:

Harmful if swallowed.

#### Acute dermal toxicity:

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

#### Acute inhalation toxicity:

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

#### Skin corrosion/irritation:

Causes skin irritation.

#### Serious eye damage/irritation:

Causes serious eye irritation.

#### Respiratory or skin sensitisation:

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.

#### 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.

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### Aspiration hazard:

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

### Additional information:

No data available

### 11.2. Information on other hazards

No data available

## SECTION 12: Ecological information

### 12.1. Toxicity

guanidinium chloride CAS No.: 50-01-1 EC No.: 200-002-3

EC<sub>50</sub>: 70.2 mg/L 2 d (Daphnia and other aquatic invertebrates)

ErC<sub>50</sub>: 33.5 mg/L 3 d (Algae/water plant)

### Aquatic toxicity:

Harmful to aquatic life with long lasting effects.

### 12.2. Persistence and degradability

No data available

### 12.3. Bioaccumulative potential

#### Accumulation / Evaluation:

Does not significantly accumulate in organisms.

### 12.4. Mobility in soil

No data available

### 12.5. Results of PBT and vPvB assessment

guanidinium chloride CAS No.: 50-01-1 EC No.: 200-002-3

Results of PBT and vPvB assessment: —

### 12.6. Endocrine disrupting properties

No data available

### 12.7. Other adverse effects

No data available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

premixed wastes composed of at least one hazardous waste

### Waste treatment options

#### Appropriate disposal / Product:

Consult the appropriate local waste disposal expert about waste disposal.

## SECTION 14: Transport information

| Land transport (ADR/RID)                                   | Inland waterway craft (ADN)                                | Sea transport (IMDG)                                       | Air transport (ICAO-TI / IATA-DGR)                         |
|--|--|--|--|
| <b>14.1. UN number or ID number</b>                        |  |  |  |
| No dangerous good in sense of these transport regulations. | No dangerous good in sense of these transport regulations. | No dangerous good in sense of these transport regulations. | No dangerous good in sense of these transport regulations. |
| <b>14.2. UN proper shipping name</b>                       |  |  |  |
| No dangerous good in sense of these transport regulations. | No dangerous good in sense of these transport regulations. | No dangerous good in sense of these transport regulations. | No dangerous good in sense of these transport regulations. |
| <b>14.3. Transport hazard class(es)</b>                    |  |  |  |
| not relevant   | not relevant   | not relevant   | not relevant   |

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| Land transport (ADR/RID)                  | Inland waterway craft (ADN) | Sea transport (IMDG) | Air transport (ICAO-TI / IATA-DGR) |
|---|-----------------------------|----------------------|------------------------------------|
| <b>14.4. Packing group</b>                |                             |                      |                                    |
| not relevant                              | not relevant                | not relevant         | not relevant                       |
| <b>14.5. Environmental hazards</b>        |                             |                      |                                    |
| not relevant                              | not relevant                | not relevant         | not relevant                       |
| <b>14.6. Special precautions for user</b> |                             |                      |                                    |
| not relevant                              | not relevant                | not relevant         | not relevant                       |

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

No data available

## SECTION 15: Regulatory information

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

#### 15.1.1. EU legislation

##### Other regulations (EU):

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive]: This product is not assigned to a hazard category.

#### 15.1.2. National regulations

No data available

### 15.2. Chemical Safety Assessment

No data available

## SECTION 16: Other information

### 16.1. Indication of changes

No data available

### 16.2. Abbreviations and acronyms

No data available

### 16.3. Key literature references and sources for data

No data available

### 16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

| Hazard classes and hazard categories                              | Hazard statements  | Classification procedure |
|---|--|--------------------------|
| Acute toxicity (oral) ( <i>Acute Tox. 4</i> )                     | H302: Harmful if swallowed.                              |                          |
| Skin corrosion/irritation ( <i>Skin Irrit. 2</i> )                | H315: Causes skin irritation.                            |                          |
| Serious eye damage/eye irritation ( <i>Eye Irrit. 2</i> )         | H319: Causes serious eye irritation.                     |                          |
| Hazardous to the aquatic environment ( <i>Aquatic Chronic 3</i> ) | H412: Harmful to aquatic life with long lasting effects. |                          |

### 16.5. Relevant R-, H- and EUH-phrases (Number and full text)

| Hazard statements |                                |
|-------------------|--------------------------------|
| H302              | Harmful if swallowed.          |
| H315              | Causes skin irritation.        |
| H319              | Causes serious eye irritation. |

### 16.6. Training advice

No data available

### 16.7. Additional information

No data available