

## MSDS Compilation - bead-LAMP kits

**Vienna Biocenter Core Facilities GmbH  
Dr Bohr Gasse 3, 1030, Vienna, Austria**

This information is provided for purchasers of bead-LAMP kit 100 reactions and bead-LAMP kit 1000 reactions.

Table 1. Overview of Vienna Biocenter Core Facilities MSDS for bead-LAMP kits

| Tube | Reagent                                   | MSDS             |
|------|---|------------------|
| 1B   | QuickExtract DNA extraction solution      | No <sup>1)</sup> |
| 2B   | Bead-LAMP mix                             | No <sup>1)</sup> |
| 3B   | SARS-CoV-2 primers                        | No <sup>1)</sup> |
| 4B   | Guanidine hydrochloride solution (160 mM) | YES              |
| 5B   | Positive control                          | No <sup>1)</sup> |
| 6B   | Magnetic beads                            | No <sup>1)</sup> |

1) Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. Not a hazardous substance or mixture according to EC directives 67/548/EEC or 1999/45/EC.

## Safety Data Sheet

This safety data sheet was created pursuant to the requirements of:  
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Version 1.0

Date of print 2020-12-09

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

#### 1.1. Product identifier

|                |   |
|----------------|---|
| Product Name   | Guanidine hydrochloride solution  |
| Product Number | N/A   |
| Kit name       | bead-LAMP kit   |
| Brand          | Vienna Biocenter Core Facilities GmbH   |
| REACH No.      | A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline. |

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

|                      |  |
|----------------------|--|
| Recommended use      | Laboratory chemicals. This product is for research and development only. |
| Uses advised against | No information available   |

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

|           |  |
|-----------|--|
| Company   | Vienna Biocenter Core Facilities GmbH<br>Dr Bohr Gasse 3<br>1030 Vienna<br>Austria |
| Telephone | +43 1 796 23 24 7000   |
| Email     | contact@vbcf.ac.at   |

#### 1.4. Emergency telephone number

|                     |                 |
|---------------------|-----------------|
| Emergency Telephone | +43 1 406 43 43 |
|---------------------|-----------------|

### SECTION 2: Hazards identification

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

##### Classification according to Regulation (EC) No.1272/2008

Acute toxicity, Oral (Category 4), H302

Acute toxicity, Inhalation (Category 4), H332

Skin irritation (Category 2), H315

Eye irritation (Category 2), H319

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### 2.2. Label elements

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

##### Hazard components for labelling

Guanidine hydrochloride solution

Signal word: Warning

Pictograms:



##### Hazard statements

H302 + H332

Harmful if swallowed or if inhaled.

H315

Causes skin irritation.

H319

Causes serious eye irritation.

##### Precautionary statements - EU (§28, 1272/2008)

P261

Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

|                                |  |
|--------------------------------|--|
| P280                           | Wear eye protection/ face protection.  |
| P301 + P312 + P330             | IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.   |
| P304 + P340 + P312             | IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.       |
| P305 + P351 + P338             | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P337 + P313                    | If eye irritation persists: Get medical advice/ attention.   |
| Supplemental Hazard Statements | None   |

### **2.3. Other hazards**

None known This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## **SECTION 3: Composition/information on ingredients**

### **3.2. Mixtures**

Synonyms Guanidinium chloride  
Aminoformamidinehydrochloride  
Guanidium chloride

Molecular weight 95,53 g/mol

| Component                   | Classification        | Concentration   |
|-----------------------------|-----------------------|---|
| <b>Guanidinium chloride</b> |                       |   |
| CAS-No.                     | 50-01-1               | Acute Tox. 4; Skin Irrit. 2;<br>Eye Irrit. 2; H302, H332,<br>H315, H319 |
| EC-No.                      | 200-002-3             |   |
| Index-No.                   | 607-148-00-0          |   |
| Registration number         | 01-2119977063-35-XXXX |   |
|                             |                       | >= 1,4 - < 1,8 %  |

Full text of H and EUH statements: see section 16

## **SECTION 4: First-aid measures**

### **4.1. Description of first aid measures**

|                            |   |
|----------------------------|---|
| <b>General information</b> | Consult a physician. Show this safety data sheet to the doctor in attendance.                                   |
| <b>Inhalation</b>          | If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. |
| <b>Eye contact</b>         | Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.                          |
| <b>Skin contact</b>        | Wash off with soap and plenty of water. Consult a physician.  |
| <b>Ingestion</b>           | Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.             |

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

**Symptoms** The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

No data available.

## **SECTION 5: Fire-fighting measures**

### **5.1. Extinguishing media**

**Suitable Extinguishing Media** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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

Carbon oxides, Nitrogen oxides (NOx), Hydrogen chloride gas

## **5.3. Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

## **5.4 Additional information**

No data available

# **SECTION 6: Accidental release measures**

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

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.  
For personal protection see section 8.

## **6.2. Environmental precautions**

Do not let product enter drains.

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

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

## **6.4. Reference to other sections**

For disposal see section 13.

# **SECTION 7: Handling and storage**

## **7.1. Precautions for safe handling**

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.  
For precautions see section 2.2.

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

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

## **7.3. Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

# **SECTION 8: Exposure controls/personal protection**

## **8.1. Control parameters**

**Components with workplace control parameters**

## **8.2. Exposure controls**

### **Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### **Protective and hygiene measures**

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Wash hands before breaks and after work.

### **Eye/face protection**

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

### **Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min  
Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact  
Material: Nitrile rubber  
Minimum layer thickness: 0,11 mm  
Break through time: 480 min  
Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M) data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374  
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

#### **Body protection**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### **Environmental exposure controls**

Do not let product enter drains.

## **SECTION 9: Physical and chemical properties**

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

|   |                   |
|---|-------------------|
| a) Appearance                                   | Form: liquid      |
| b) Odour  | No data available |
| c) Odour Threshold                              | No data available |
| d) pH   | No data available |
| e) Melting point/freezing point                 | No data available |
| f) Initial boiling point and boiling range      | No data available |
| g) Flash point                                  | No data available |
| h) Evaporation rate                             | No data available |
| i) Flammability (solid, gas)                    | No data available |
| j) Upper/lower flammability or explosive limits | No data available |
| k) Vapour pressure                              | No data available |
| l) Vapour density                               | No data available |
| m) Relative density                             | No data available |
| n) Water solubility                             | No data available |
| o) Partition coefficient: n-octanol/water       | No data available |
| p) Auto-ignition temperature                    | No data available |
| q) Decomposition temperature                    | No data available |
| r) Viscosity                                    | No data available |
| s) Explosive properties                         | No data available |
| t) Oxidizing properties                         | No data available |

### **9.2. Other information**

No data available

## **SECTION 10: Stability and reactivity**

### **10.1. Reactivity**

No data available

### **10.2. Chemical stability**

Stable under recommended storage conditions.

### **10.3. Possibility of hazardous reactions**

No data available

**10.4. Conditions to avoid**

No data available

**10.5. Incompatible materials**

Strong oxidizing agents

**10.6. Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx), Hydrogen chloride gas

Other decomposition products - No data available

In the event of fire: see section 5

**SECTION 11: Toxicological information**

**11.1. Information on toxicological effects**

**Acute toxicity**

No data available

**Skin corrosion/irritation**

No data available

**Serious eye damage/eye irritation**

No data available

**Respiratory or skin sensitisation**

No data available

**Germ cell mutagenicity**

No data available

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**Reproductive toxicity**

No data available

**Specific target organ toxicity - single exposure**

No data available

**Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

No data available

**Additional Information**

RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**SECTION 12: Ecological information**

**12.1. Toxicity**

No data available

**12.2. Persistence and degradability**

No data available

**12.3. Bioaccumulative potential**

No data available

**12.4. Mobility in soil**

No data available

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

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**12.6. Other adverse effects**

No data available

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

**Product**

Offer surplus and non-recyclable solutions to a licensed disposal company

### Contaminated packaging

Dispose of as unused product.

## SECTION 14: Transport information

### 14.1. UN number

ADR/RID: -

IMDG: -

IATA: -

### 14.2. UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

### 14.3 Transport hazard class(es)

ADR/RID: -

IMDG: -

IATA: -

### 14.4 Packaging group

ADR/RID: -

IMDG: -

IATA: -

### 14.5. Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

### 14.6. Special precautions for user

No data available

## SECTION 15: Regulatory information

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

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

### 15.2. Chemical safety assessment

For this product a chemical safety assessment was not carried out.

## SECTION 16: Other information

### Full text of H-Statements referred to under sections 2 and 3.

|             |                                     |
|-------------|-------------------------------------|
| H302        | Harmful if swallowed.               |
| H302 + H332 | Harmful if swallowed or if inhaled. |
| H315        | Causes skin irritation.             |
| H319        | Causes serious eye irritation.      |
| H332        | Harmful if inhaled.                 |

### Disclaimer

IMPORTANT: The information in this SDS is provided in good faith based on our knowledge as of the issue date (or subsequent revision date, if any), and is to be used only as a guide. This SDS does not constitute a guarantee (express or implied) of any kind and we make no warranties or merchantability or fitness for a particular purpose. This information relates only to the designated product as shipped and may not be valid if the product is used in combination with any other materials or is not used in accordance with our instructions. It is the responsibility of the buyer/user to ensure that its activities comply with all applicable governmental requirements. Since conditions of use of the product are not under the control of Vienna Biocenter Core Facilities GmbH, it is the duty of the buyer/user to determine the necessary conditions for the safe use of the product. Vienna Biocenter Core Facilities GmbH will not be liable for any damages resulting from handling or contact with the product.

**End of Safety Data Sheet**