



according to Regulation (EC) No 1907/2006

# nBu-PArg(20)\*HCI

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

#### 1.1. Product identifier

nBu-PArg(20)\*HCI

#### Further trade names

n-Butyl-poly-L-Arginine hydrochloride

CAS No: 26982-20-7

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

### Use of the substance/mixture

Laboratory chemical

### Uses advised against

Do not use for private purposes (household).

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

Company name: Iris Biotech GmbH

Street: Adalbert-Zoellner-Straße 1
Place: D-95615 Marktredwitz, Germany

Post-office box: 568

D-95605 Marktredwitz, Germany

Telephone: +49 9231 97121 0 Telefax: +49 9231 97121 99

e-mail: info@iris-biotech.de

Contact person: Compliance Department Telephone: +49 9231 97121 0

e-mail: sds@iris-biotech.de
Internet: www.iris-biotech.de

Responsible Department: Only available during office hours.

**1.4. Emergency telephone** +49 (0)89 19240 (POISON CENTER Munich: 24 h)

number:

# **Further Information**

This product does not meet the criteria for classification into a hazardous class according to Regulation (EC) No 1272/2008 on the classification, labeling and packaging of substances and mixtures. A safety data sheet is provided which does not fully comply with Article 31 and Annex II of REACH.

Voluntary safety information following the Safety Data Sheet format according to Regulation (EC) No. 1907/2006 (REACH)

# **SECTION 2: Hazards identification**

### 2.2. Label elements

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

#### **Precautionary statements**

P202 Do not handle until all safety precautions have been read and understood.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P262 Do not get in eyes, on skin, or on clothing.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing

protection.

### Additional advice on labelling

Warning - substance not yet tested completely.

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

### 3.1. Substances



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#### **Chemical characterization**

n-Butyl-poly-L-Arginine hydrochloride Molecular weight: 3800 Da

### **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).

#### After inhalation

Remove casualty to fresh air and keep warm and at rest. In case of irregular breathing or respiratory arrest provide artificial respiration.

In all cases of doubt, or when symptoms persist, seek medical advice.

#### After contact with skin

After contact with skin, wash immediately with plenty of water and soap.

In all cases of doubt, or when symptoms persist, seek medical advice.

#### After contact with eyes

If product gets into the eye, keep eyelid open and rinse immediately with large quantities of water, for at least 5 minutes. Subsequently consult an ophthalmologist.

### After ingestion

Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person or a person with cramps.

In all cases of doubt, or when symptoms persist, seek medical advice.

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

No data 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

Water spray, alcohol resistant foam. Dry extinguishing powder, Carbon dioxide (CO2), Sand.

#### Unsuitable extinguishing media

High power water jet.

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

Thermal decomposition can lead to the escape of irritating gases and vapours.

In case of fire may be liberated: Carbon dioxide (CO2). Carbon monoxide (CO). Nitrogen oxides (NOx).Hydrogen chloride (HCI)

#### 5.3. Advice for firefighters

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

#### Additional information

Usual measures for fire prevention.

### **SECTION 6: Accidental release measures**

# 6.1. Personal precautions, protective equipment and emergency procedures





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#### General advice

Provide adequate ventilation. Avoid breathing dust/fume/gas/mist/vapours/spray.

Avoid contact with skin, eyes and clothes.

Wear personal protection equipment.

In case of fire: Evacuate area.

#### 6.2. Environmental precautions

Do not allow to enter into soil/subsoil.

Do not allow to enter into surface water or drains.

# 6.3. Methods and material for containment and cleaning up

#### Other information

Take up mechanically, placing in appropriate containers for disposal. Avoid dust formation.

Clear contaminated areas thoroughly.

### 6.4. Reference to other sections

Treat the recovered material as prescribed in the section on waste disposal.

# **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

#### Advice on safe handling

Provide adequate ventilation.

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

Avoid contact with skin, eyes and clothes.

### Advice on protection against fire and explosion

Usual measures for fire prevention.

### Advice on general occupational hygiene

Avoid contact with skin, eyes and clothes. Provide adequate ventilation. When using do not eat, drink or smoke. Wash hands before breaks and after work.

# 7.2. Conditions for safe storage, including any incompatibilities

# Requirements for storage rooms and vessels

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

Handle and store contents under inert gas. Protect from moisture.

storage temperature: -20°C

# 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

### Additional advice on limit values

To date, no national critical limit values exist.

### 8.2. Exposure controls

#### Appropriate engineering controls

The receiver of our product is singularly responsible for adhering to existing laws and regulations.

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

### Eye/face protection

Wear eye/face protection.

### **Hand protection**

Wear suitable gloves.

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.





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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.

### Skin protection

Wear suitable protective clothing.

# **Respiratory protection**

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn

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

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

Physical state: solid
Colour: white
Odour: odourless

### Changes in the physical state

Melting point/freezing point: not determined
Boiling point or initial boiling point and not determined

boiling range:

Sublimation point: not determined
Softening point: not determined
: No data available
Flash point: No data available

Flammability

Solid/liquid: No data available
Gas: not applicable

# **Explosive properties**

No data available

Lower explosion limits:

Upper explosion limits:

No data available

No data available

Auto-ignition temperature:

No data available

Self-ignition temperature

Solid:
Gas:

Decomposition temperature:

PH-Value:

No data available
not applicable
not determined

Water solubility:

No data available

# Solubility in other solvents

No data available

Partition coefficient n-octanol/water:

Vapour pressure:

vapour pressure:

not determined

Relative vapour density:

not determined

### 9.2. Other information

### Information with regard to physical hazard classes

Sustaining combustion: No data available





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Oxidizing properties

No data available

#### Other safety characteristics

Solvent content:

Solid content:

No data available

not determined

Evaporation rate:

not determined

**Further Information** 

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

#### 10.1. Reactivity

No data available

### 10.2. Chemical stability

The product is under normal ambient conditions (room temperature) chemically stable.

### 10.3. Possibility of hazardous reactions

No data available

#### 10.4. Conditions to avoid

Protect from moisture.

Keep away from heat.

# 10.5. Incompatible materials

Oxidizing agents, strong.

### 10.6. Hazardous decomposition products

Thermal decomposition can lead to the escape of irritating gases and vapours.

In case of fire may be liberated: Carbon dioxide (CO2). Carbon monoxide (CO). Nitrogen oxides (NOx).

Hydrogen chloride (HCI)

### **SECTION 11: Toxicological information**

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

#### Toxicocinetics, metabolism and distribution

No data available

# **Acute toxicity**

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

# Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

### 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.

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.

### STOT-single exposure

May cause respiratory irritation.

#### 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.





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### Specific effects in experiment on an animal

No data available

#### Practical experience

No data available

#### **Further information**

RTECS: No data available

Caution! To the best of our knowledge the toxicological properties of this material 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

No data available

#### 12.7. Other adverse effects

Warning - substance not yet tested completely.

### **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

### **Disposal recommendations**

Dispose of waste according to applicable legislation.

Consult the appropriate local waste disposal expert about waste disposal.

### Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

### **SECTION 14: Transport information**

Land transport (ADR/RID)

**14.2. UN proper shipping name:** No dangerous good in sense of these transport regulations.

Inland waterways transport (ADN)

**14.2. UN proper shipping name:** No dangerous good in sense of these transport regulations.

Marine transport (IMDG)

**14.2. UN proper shipping name:** No dangerous good in sense of these transport regulations.

Air transport (ICAO-TI/IATA-DGR)

**14.2. UN proper shipping name:** No dangerous good in sense of these transport regulations.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

### 14.6. Special precautions for user

No data available

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

not applicable



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### **SECTION 15: Regulatory information**

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

### **EU** regulatory information

Information according to 2012/18/EU

Not subject to 2012/18/EU (SEVESO III)

(SEVESO III):

#### **Additional information**

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

### **National regulatory information**

Water hazard class (D): 3 - highly hazardous to water

#### 15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

#### **SECTION 16: Other information**

#### Relevant H and EUH statements (number and full text)

H315 Causes skin irritation.

H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

### **Further Information**

Warning - substance not yet tested completely.

The product is intended for research, analysis and scientific education.

The receiver of our product is singularly responsible for adhering to existing laws and regulations.

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 above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.