

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

**H-L-Arg-pNA\*2HBr**

Revision date: 19.07.2019

Product code: HAA1177

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

#### 1.1. Product identifier

H-L-Arg-pNA\*2HBr

##### Further trade names

L-Arginine p-Nitroanilide dihydrobromide

CAS No: 6154-84-3

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

##### Use of the substance/mixture

Laboratory chemical. Manufacture of the substance.

##### 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  
e-mail: info@iris-biotech.de  
Internet: www.iris-biotech.de

Telefax: +49 9231 97121 99

#### 1.4. Emergency telephone number:

+49 (0)89 19240

#### 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

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

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

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

#### 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.

##### Additional advice on labelling

Warning - substance not yet tested completely.

#### 2.3. Other hazards

No information available.

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### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

##### Chemical characterization

L-Arginine p-Nitroanilide dihydrobromide

Sum formula: C<sub>12</sub>H<sub>18</sub>N<sub>6</sub>O<sub>3</sub>\*2HBr

Molecular weight: 456.2 g/mol

### 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

Provide fresh air. 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

Wash with plenty of water. Take off contaminated clothing and wash it before reuse. 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

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

Co-ordinate fire-fighting measures to the fire surroundings. Water spray. alcohol resistant foam. Dry extinguishing powder. Carbon dioxide (CO<sub>2</sub>). Sand.

##### Unsuitable extinguishing media

High power water jet.

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

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

In case of fire may be liberated: Carbon dioxide (CO<sub>2</sub>). Carbon monoxide (CO). Nitrogen oxides (NO<sub>x</sub>).

#### 5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

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### Additional information

Usual measures for fire prevention.

## SECTION 6: Accidental release measures

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

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

Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal. Take up mechanically, placing in appropriate containers for disposal. Avoid dust formation.

Clear contaminated areas thoroughly.

### 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

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.

### 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: +2°C - +8°C

#### Hints on joint storage

No special measures are necessary.

### 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.

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### Protective and hygiene measures

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

### Eye/face protection

Wear eye protection/face protection.

### 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. Wear suitable gloves.

### Skin protection

Use of protective clothing.

### Respiratory protection

In case of inadequate ventilation wear respiratory protection. If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

### Environmental exposure controls

Discharge into the environment must be avoided.

## SECTION 9: Physical and chemical properties

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

Physical state:	Powder	
Colour:	white/ whitish / off-white	
Odour:	No data available	
pH-Value:		not determined

#### Changes in the physical state

Melting point:	not determined
Initial boiling point and boiling range:	not determined
Sublimation point:	not determined
Softening point:	not determined
Flash point:	No data available
Sustaining combustion:	No data available

#### Flammability

Solid:	not determined
Gas:	not applicable

#### Explosive properties

The product is not: Explosive.

Lower explosion limits:	not determined
Upper explosion limits:	not determined
Ignition temperature:	not determined

#### Auto-ignition temperature

Solid:	not determined
Gas:	not applicable
Decomposition temperature:	not determined

#### Oxidizing properties

No data available

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Vapour pressure:	not determined
Density:	not determined
Water solubility:	No data available
<b>Solubility in other solvents</b>	
not determined	
Partition coefficient:	not determined
Vapour density:	not determined
Evaporation rate:	not determined
Solvent content:	No data available

#### **9.2. Other information**

Solid content:	not determined
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### **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**

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 (CO<sub>2</sub>). Carbon monoxide (CO). Nitrogen oxides (NO<sub>x</sub>).

#### **Further information**

In case of fire: See chapter 5.

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

#### **11.1. Information on toxicological effects**

##### **Toxicokinetics, metabolism and distribution**

No data available

##### **Acute toxicity**

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

##### **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.  
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.

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### **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.

### **Specific effects in experiment on an animal**

No data available

### **Additional information on tests**

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

### **Practical experience**

#### **Observations relevant to classification**

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**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

### **12.6. Other adverse effects**

Warning - substance not yet tested completely.

#### **Further information**

Avoid release to the environment.

## **SECTION 13: Disposal considerations**

### **13.1. Waste treatment methods**

#### **Advice on disposal**

Dispose of waste according to applicable legislation.

Consult the appropriate local waste disposal expert about waste disposal.

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

#### **Contaminated packaging**

Wash with plenty of water. Completely emptied packages can be recycled.

## **SECTION 14: Transport information**

### **Land transport (ADR/RID)**

#### **14.2. UN proper shipping name:**

No dangerous good in sense of these transport regulations.

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### 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 information available.

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

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

#### Additional information

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

#### National regulatory information

Water contaminating class (D): 3 - highly water contaminating

### 15.2. Chemical safety assessment

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

## SECTION 16: Other information

### Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service  
LC50: Lethal concentration, 50%  
LD50: Lethal dose, 50%  
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  
DNEL: Derived No Effect Level  
DMEL: Derived Minimal Effect Level  
PNEC: Predicted No Effect Concentration  
ATE: Acute toxicity estimate  
LL50: Lethal loading, 50%  
EL50: Effect loading, 50%

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EC50: Effective Concentration 50%  
ErC50: Effective Concentration 50%, growth rate  
NOEC: No Observed Effect Concentration  
BCF: Bio-concentration factor  
PBT: persistent, bioaccumulative, toxic  
vPvB: very persistent, very bioaccumulative  
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)  
EmS: Emergency Schedules  
MFAG: Medical First Aid Guide  
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 table at <http://abbrev.esdscom.eu>

#### Further Information

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