

# SAFETY DATA SHEET

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

### 1.1 Product identifiers

Product name : N $\alpha$ -(2,4-Dinitrophenyl)-L-arginine  
Product Number : N159223  
Brand : aladdin  
CAS-No. : 1602-42-2

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

Identified uses : Laboratory chemicals, Manufacture of substances.

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

Company : Shanghai Aladdin Biochemical Tech Co., Ltd  
Address : 36 Xinjinqiao Road, Shanghai  
Telephone : 400-620-6333  
Fax : no data available

### 1.4 Emergency telephone number

Emergency Phone : 0532-83889090

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)  
CFR 1910.1200: Flammable Solids [Category 1]

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger

Hazard statement(s)

H228 Flammable solid

Precautionary statement(s)

P210 Keep away from heat, hot surface, sparks, open flames and other ignition sources. - No smoking.  
P240 Ground/bond container and receiving equipment.  
P241 Use explosion-proof [electrical/ventilating/lighting/...] equipment.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.

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P370+P378

In case of fire: Use ... to extinguish.

## 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

### SECTION 3: Composition/information on ingredients

#### 3.1 Substances

|                  |                                                                 |
|------------------|-----------------------------------------------------------------|
| Synonyms         | : N $\alpha$ -Dnp-L-arginine; Dnp-Arg-OH                        |
| Formula          | : C <sub>12</sub> H <sub>16</sub> N <sub>6</sub> O <sub>6</sub> |
| Molecular weight | : 340.3                                                         |
| CAS No.          | : 1602-42-2                                                     |
| EC-NO.           | : no data available                                             |

| Component                                                  | Classification    | Concentration |
|------------------------------------------------------------|-------------------|---------------|
| <b>N<math>\alpha</math>-(2,4-Dinitrophenyl)-L-arginine</b> |                   |               |
|                                                            | no data available | ≥97%(HPLC)(T) |

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

##### General advice

no data available

##### If inhaled

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

##### In case of skin contact

Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention.

##### In case of 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.

##### If swallowed

Get medical advice/attention if you feel unwell. Rinse mouth.

#### 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

no data available

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

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**Suitable extinguishing media**

Dry chemical, foam, water spray, carbon dioxide.

**Unsuitable extinguishing media**

no data available

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

These products include: Carbon oxides Nitrogen oxides. Explosion risk in case of fire. Fight fire remotely due to the risk of explosion. Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume. Closed containers may explode from heat of a fire.

**5.3 Advice for firefighters**

Wear self-contained breathing apparatus if possible. Combat fire from a sheltered position.

**5.4 Further information**

Use water spray to cool unopened containers.

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**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Keep people away from and upwind of spill/leak. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.

**6.2 Environmental precautions**

Prevent product from entering drains.

**6.3 Methods and materials for containment and cleaning up**

Clean up the dust and collect it in a closed container, taking care not to disperse it. Adhered or aggregated materials shall be disposed of in a timely manner in accordance with local laws and regulations. Prevention of secondary hazards: remove all sources of ignition. In case of fire, fire extinguishing devices shall be prepared. Use spark proof tools and explosion-proof equipment.

**6.4 Reference to other sections**

For disposal see section 13.

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**SECTION 7: Handling and storage****7.1 Precautions for safe handling**

Handling is performed in a well ventilated place. Wear suitable protective equipment. Be careful not to cause leakage, overflow, or dispersion. Steam should not be generated unnecessarily. Keep away from heat/sparks/open flame/hot surfaces. -No smoking. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment. Avoid shock and friction. Wash hands and face before breaks and immediately after handling the product. Use a local exhaust if dust or aerosol will be generated. Avoid contact with skin, eyes and clothing. Conditions for safe storage, including any incompatibilities

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## 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed. Store in a cool and dark place. Be sure not to give the container unexpected impacts, such as falling down or falling off. Store away from incompatible materials such as oxidizing agents.

## 7.3 Specific end use(s)

no data available

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## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

### 8.2 Exposure controls

#### Appropriate engineering controls

Follow safe industrial engineering/laboratory practices when handling any chemical. Install a closed system or local exhaust. Also install safety shower and eye bath.

#### Personal protective equipment

##### Eye/face protection

Safety glasses. A face-shield, if the situation requires.

##### Skin protection

Gloves must be checked before use. Please use proper methods to remove the gloves (do not touch the outer surface of the gloves), and avoid any skin parts contacting the product. After use, please handle the contaminated gloves carefully according to relevant laws and regulations and effective laboratory rules and procedures. Please clean and blow dry the protective gloves selected for your hands must meet the specifications given in regulation (EU) 2016 / 425 and the en 374 standard derived from it.

##### Body Protection

Protective gloves. Protective clothing. Protective boots, if the situation requires.

##### Respiratory protection

Dust respirator. Follow local and national regulations.

##### Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

|                                            |                                                          |
|--------------------------------------------|----------------------------------------------------------|
| a) Appearance                              | form: Crystal - Powder Solid color: Pale yellow - Yellow |
| 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                                        |

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|                                                 |                   |
|-------------------------------------------------|-------------------|
| 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 N                       | no data available |
| t) Oxidizing properties N                       | no data available |

## 9.2 Other safety 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

Heat, Spark, Open flame, Static discharge, Shock, Friction

### 10.5 Incompatible materials

Oxidizing agents

### 10.6 Hazardous decomposition products

Carbon dioxide, Carbon monoxide, Nitrogen oxides (NO<sub>x</sub>)

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Acute toxicity

no data available

Skin corrosion/irritation

no data available

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**Serious eye damage/eye irritation**

no data available

**Respiratory or skin sensitisation**

no data available

**Germ cell mutagenicity**

no data available

**Carcinogenicity**

no data available

**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**

no data available

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**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

**12.6 Other adverse effects**

no data available

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**SECTION 13:****13.1 Disposal considerations**

Product

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Disposal of product: Recycle to process if possible. It is the generator's responsibility to comply with Federal, State and Local rules and regulations. Consult an expert of disposal. You may be able to dissolve or mix material with a combustible solvent and little by little burn in a chemical incinerator equipped with an afterburner and scrubber system. If a large amount of the substance is burned at a time, an explosion may occur. This section is intended to provide assistance but does not replace these laws, nor does compliance in accordance with this section ensure regulatory compliance according to the law. US EPA guidelines for Identification and Listing of Hazardous Waste are listed in 40 CFR Parts 261. The product should not be allowed to enter the environment, drains, water ways, or the soil. Other considerations: Observe all federal, state and local regulations when disposing of the substance.

#### **Contaminated packaging**

Disposal of container: Dispose of as unused product. Do not re-use empty containers.

## **SECTION 14: Transport information**

### **DOT (US)**

|                                                        |                                            |                                             |
|--------------------------------------------------------|--------------------------------------------|---------------------------------------------|
| UN number: UN1325                                      | Packing group: II                          | Class: 4.1                                  |
| Proper shipping name: Flammable solids, organic, n.o.s | Reportable Quantity(RQ): no data available | Poison Inhalation Hazard: no data available |
| Environmental Hazards: no data available               |                                            |                                             |

### **IMDG**

|                                                        |                   |                              |
|--------------------------------------------------------|-------------------|------------------------------|
| UN number: UN1325                                      | Packing group: II | EMS-No: EmS number: F-A, S-G |
| Proper shipping name: Flammable solids, organic, n.o.s |                   |                              |

### **IATA**

|                                                        |                   |            |
|--------------------------------------------------------|-------------------|------------|
| UN number: UN1325                                      | Packing group: II | Class: 4.1 |
| Proper shipping name: Flammable solids, organic, n.o.s |                   |            |

## **SECTION 15: Regulatory information**

### **Toxic Substance Control Act**

This product is NOT on the EPA Toxic Substances Control Act (TSCA) inventory. The following notices are required by 40 CFR 720.36 (C) for those products not on the inventory list: (i) These products are supplied solely for use in research and development by or under the supervision of a technically qualified individual as defined in 40 CFR 720.0 et sec. (ii) The health risks of these products have not been fully determined. Any information that is or becomes available will be supplied on a SDS sheet. US Federal Regulations

### **US Federal Regulations**

SARA 313: Not Listed

SARA 302: Not Listed

### **State Regulations**

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Massachusetts Not Listed

New Jersey Not Listed

Pennsylvania Not Listed

#### Other Information

NFPA Rating: HMIS Classification: Health: 0 Health: 0 Flammability: 2 Flammability: 2 Instability: 2 Physical: 2

#### International Inventories

EC-No: 216-497-4

## SECTION 16: Other information

#### Further information

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