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

### 1.1. Product identifier

N3-Phenylpropionic-OH

**Further trade names**

3-(4-azidophenyl)propanoic acid
4-Azidobenzenepropanoic acid
3-(p-Azidophenyl)propionic acid
3-(4-Azidophenyl)propionic acid
N3-Phenylpropanoic-OH
N3-Benzenepropanoic-OH
N3-Benzenepropionic-OH

| | |
|---|---|
| Substance name: | N3-Phenylpropionic-OH |
| CAS No: | 103489-31-2 |
| EC No: | 622-482-7 |

### 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).
Restrictions on use: Pharmaceutical substance

### 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<br>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 number:

+49 (0)89 19240 (POISON CENTER Munich: 24 h)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

**GB CLP Regulation**

Flam. Sol. 1; H228
Skin Irrit. 2; H315
Eye Irrit. 2; H319
STOT SE 3; H335

Full text of hazard statements: see SECTION 16.

### 2.2. Label elements

**GB CLP Regulation**

**Signal word:** Danger

**Pictograms:**

**Hazard statements**

| | |
|---|---|
| H228 | Flammable solid. |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H335 | May cause respiratory irritation. |

**Precautionary statements**

| | |
|---|---|
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P240 | Ground and bond container and receiving equipment. |
| P241 | Use explosion-proof electrical/ventilating/lighting equipment. |
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. |
| P302+P352 | IF ON SKIN: Wash with plenty of Water. |
| P332+P313 | If skin irritation occurs: Get medical advice/attention. |
| P362+P364 | Take off contaminated clothing and wash it before reuse. |
| P304+P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| P312 | 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. |
| P405 | Store locked up. |
| P501 | Dispose of contents/container to an approved disposal site. |

**Additional advice on labelling**

Warning - substance not yet tested completely.

### 2.3. Other hazards

Product is not dust explosive in its original delivery form. The addition of particulate matter, however, results in a dust explosion risk.

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

**Chemical characterization**

3-(4-azidophenyl)propanoic acid

Sum formula: C9H9N3O2

Molecular weight: 191,19 g/mol

**Hazardous components**

| CAS No | Chemical name | | | Quantity |
|---|---|---|---|---|
| | EC No | Index No | REACH No | |
| | Classification (GB CLP Regulation) | | | |
| 103489-31-2 | N3-Phenylpropionic-OH | | | 100 % |
| | 622-482-7 | | | |
| | Flam. Sol. 1, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3; H228 H315 H319 H335 | | | |

Full text of H and EUH statements: 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).
In all cases of doubt, or when symptoms persist, seek medical advice.

**After inhalation**

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

**After contact with skin**

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

**After contact with eyes**

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

**After ingestion**

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

### 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**

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

**Unsuitable extinguishing media**

High power water jet.

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

Flammable. Vapours can form explosive mixtures with air. 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).

### 5.3. Advice for firefighters

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

**Additional information**

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Usual measures for fire prevention.

## SECTION 6: Accidental release measures

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

**General advice**

Remove all sources of ignition. Provide adequate ventilation. Avoid dust formation. Do not breathe dust.
Avoid contact with skin, eyes and clothes. Use personal protection equipment. 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.

**For non-emergency personnel**

Take up carefully when dry.

**For emergency responders**

Take up mechanically, placing in appropriate containers for disposal. Take up dust-free and set down dust-free.

### 6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Explosion risk. 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

**For cleaning up**

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

**Other information**

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

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**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Avoid dust formation. Do not breathe dust. Provide adequate ventilation.
Avoid breathing dust/fume/gas/mist/vapours/spray.
Avoid contact with skin, eyes and clothes.

**Advice on protection against fire and explosion**

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Vapours can form explosive mixtures with air. Usual measures for fire prevention.

**Advice on general occupational hygiene**

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff. 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.

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

**Requirements for storage rooms and vessels**

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. 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**

Do not store together with: Oxidizing agent. Pyrophoric or self-heating substances.

### 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**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe dust. 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**

Suitable eye protection: goggles.
Tightly fitting safety goggles. Face shield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**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.

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.

**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.

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**

Discharge into the environment must be avoided.

## SECTION 9: Physical and chemical properties

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

| | |
|---|---|
| Physical state: | solid |

| | |
|---|---|
| Colour: | white/ whitish/ light yellow |
| Odour: | No data available |
| Odour threshold: | not determined |
| Melting point/freezing point: | 91 - 107 °C |
| Boiling point or initial boiling point and boiling range: | not determined |
| Flammability: | Flam. Sol. 1<br>not applicable |
| Lower explosion limits: | not determined |
| Upper explosion limits: | not determined |
| Flash point: | No data available |
| Auto-ignition temperature: | not determined |
| Decomposition temperature: | not determined |
| pH-Value: | not determined |
| Viscosity / kinematic: | not applicable |
| Water solubility: | No data available |

Solubility in other solvents

not determined

| | |
|---|---|
| Dissolution rate: | not determined |
| Partition coefficient n-octanol/water: | not determined |
| Vapour pressure: | not determined |
| Density: | not determined |
| Bulk density: | not determined |
| Relative vapour density: | not determined |

### 9.2. Other information

**Information with regard to physical hazard classes**

Explosive properties

Product is not dust explosive in its original delivery form. The addition of particulate matter, however, results in a dust explosion risk.

| | |
|---|---|
| Sustaining combustion: | No data available |

Oxidizing properties

No data available

**Other safety characteristics**

| | |
|---|---|
| Evaporation rate: | not determined |
| Solvent content: | No data available |
| Solid content: | not determined |
| Sublimation point: | not determined |
| Softening point: | not determined |
| Viscosity / dynamic: | not applicable |
| Flow time: | not applicable |

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Flammable.

The following applies to flammable, organic substances and mixtures in general: With appropriately fine distribution, when whirled up, a dust explosion potential can generally be assumed.

### 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.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

### 10.5. Incompatible materials

Oxidizing agents, strong.
Acids
Bases, 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).

**Further information**

In case of fire: See chapter 5.

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in GB CLP Regulation

**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.

**STOT-single exposure**

May cause respiratory irritation. (N3-Phenylpropionic-OH)

**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

**Practical experience**

No data available

### 11.2. Information on other hazards

**Endocrine disrupting properties**

No data available

**Further information**

This substance is classified as hazardous according to Regulation (EC) No 1272 (2008). RTECS: No data available
Caution! To the best of our knowledge the toxicological properties of this material have not been thoroughly investigated. Other dangerous properties can not be excluded.
Handle in accordance with good industrial hygiene and safety practice.

## 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 does not meet the PBT/vPvB criteria of UK REACH.

**12.6. Endocrine disrupting properties**

This substance does not have endocrine disrupting properties with respect to non-target organisms.

**12.7. Other adverse effects**

Warning - substance not yet tested completely.

**Further information**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.
Discharge into the environment must be avoided.

## SECTION 13: Disposal considerations

**13.1. Waste treatment methods**

**Disposal recommendations**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. 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**

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

## SECTION 14: Transport information

**Land transport (ADR/RID)**

| | |
|---|---|
| **14.1. UN number or ID number:** | UN 1325 |
| **14.2. UN proper shipping name:** | FLAMMABLE SOLID, ORGANIC, N.O.S. (3-(4-Azidophenyl)propionic acid) |
| **14.3. Transport hazard class(es):** | 4.1 |
| **14.4. Packing group:** | II |
| Hazard label: | 4.1 |


| | |
|---|---|
| Classification code: | F1 |
| Special Provisions: | 274 |
| Limited quantity: | 1 kg |
| Excepted quantity: | E2 |
| Transport category: | 2 |
| Hazard No: | 40 |
| Tunnel restriction code: | E |

**Inland waterways transport (ADN)**

| | |
|---|---|
| **14.1. UN number or ID number:** | UN 1325 |

**14.2. UN proper shipping name:** FLAMMABLE SOLID, ORGANIC, N.O.S. (3-(4-Azidophenyl)propionic acid)

**14.3. Transport hazard class(es):** 4.1

**14.4. Packing group:** II

Hazard label: 4.1

Classification code: F1

Special Provisions: 274

Limited quantity: 1 kg

Excepted quantity: E2

**Marine transport (IMDG)**

**14.1. UN number or ID number:** UN 1325

**14.2. UN proper shipping name:** FLAMMABLE SOLID, ORGANIC, N.O.S. (3-(4-Azidophenyl)propionic acid)

**14.3. Transport hazard class(es):** 4.1

**14.4. Packing group:** II

Hazard label: 4.1

Special Provisions: 274

Limited quantity: 1 kg

Excepted quantity: E2

EmS: F-A, S-G

**Air transport (ICAO-TI/IATA-DGR)**

**14.1. UN number or ID number:** UN 1325

**14.2. UN proper shipping name:** FLAMMABLE SOLID, ORGANIC, N.O.S. (3-(4-Azidophenyl)propionic acid)

**14.3. Transport hazard class(es):** 4.1

**14.4. Packing group:** II

Hazard label: 4.1

Special Provisions: A3 A803

Limited quantity Passenger: 5 kg

Passenger LQ: Y441

Excepted quantity: E2

IATA-packing instructions - Passenger: 445

IATA-max. quantity - Passenger: 15 kg

IATA-packing instructions - Cargo: 448

IATA-max. quantity - Cargo: 50 kg

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**14.6. Special precautions for user**

Warning: Flammable solids.

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

not applicable

## SECTION 15: Regulatory information

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

**EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 40

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**

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

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

**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
CAS: Chemical Abstracts Service
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%
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
IATA: International Air Transport Association
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
For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

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

| | |
|---|---|
| H228 | Flammable solid. |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H335 | May cause respiratory irritation. |

**Further Information**

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