# Chemical Safety Data Sheet MSDS / SDS

# 4'-AMINOBIPHENYL-3-CARBONITRILE

Revision Date:2023-11-29 Revision Number:1

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

### **Product identifier**

| Product name  | : 4'-AMINOBIPHENYL-3-CARBONITRILE  |  |  |  |
|---|--|--|--|--|
| CBnumber  | : CB2333627  |  |  |  |
| CAS   | : 443998-73-0  |  |  |  |
| Synonyms  | : 4'-AMINOBIPHENYL-3-CARBONITRILE  |  |  |  |
| Relevant identified uses of the substance or mixture and uses advised against |  |  |  |  |
| Relevant identified uses  | : For R&D use only. Not for medicinal, household or other use.                       |  |  |  |
| Uses advised against  | : none   |  |  |  |
| Company Identification  |  |  |  |  |
| Company   | : Chemicalbook   |  |  |  |
| Address   | : Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing |  |  |  |
| Telephone   | : 400-158-6606   |  |  |  |

### SECTION 2: Hazards identification

### GHS Label elements, including precautionary statements

Symbol(GHS)

Signal word

Danger

#### Precautionary statements

P273 Avoid release to the environment.

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

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continuerinsing.

### Hazard statements

H302 Harmful if swallowed

H312 Harmful in contact with skin

H318 Causes serious eye damage

H332 Harmful if inhaled

H400 Very toxic to aquatic life

# SECTION 3: Composition/information on ingredients

### Substance

| Product name | : 4'-AMINOBIPHENYL-3-CARBONITRILE |
|--------------|-----------------------------------|
| Synonyms     | : 4'-AMINOBIPHENYL-3-CARBONITRILE |
| CAS          | : 443998-73-0                     |
| MF           | : C13H10N2                        |
| MW           | : 194.23                          |

### SECTION 4: First aid measures

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

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

### Indication of any immediate medical attention and special treatment needed

No data available

### **SECTION 5: Firefighting measures**

### Special hazards arising from the substance or mixture

Carbon oxides, Nitrogen oxides (NOx)

#### Advice for firefighters

No data available

### **Further information**

No data available

### SECTION 6: Accidental release measures

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

For personal protection see section 8.

#### **Environmental precautions**

No data available

#### Methods and materials for containment and cleaning up

No data available

### Reference to other sections

For disposal see section 13.

### SECTION 7: Handling and storage

### Precautions for safe handling

For precautions see section 2.2.

### Conditions for safe storage, including any incompatibilities

Light sensitive.

### 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

### control parameter

#### Hazard composition and occupational exposure limits

Does not contain substances with occupational exposure limits.

### SECTION 9: Physical and chemical properties

### Information on basic physicochemical properties

| Appearance                              | solid                                    |
|---|--|
| Odour                                   | No data available                        |
| Odour Threshold                         | No data available                        |
| рН                                      | No data available                        |
| Melting point/freezing point            | Melting point/range: 128 - 132 °C - lit. |
| Initial boiling point and boiling range | No data available                        |
| Flash point                             | No data available                        |
| Evaporation rate                        | No data available                        |
| Flammability (solid, gas)               | No data available                        |
| Upper/lower flammability or explosive   | No data available                        |
| limits                                  |  |
| Vapour pressure                         | No data available                        |
| Vapour density                          | No data available                        |
| Relative density                        | No data available                        |
| Water solubility                        | No data available                        |
| Partition coefficient: n-octanol/water  | log Pow: 2,821                           |
| Autoignition temperature                | No data available                        |
| Decomposition temperature               | No data available                        |
| Viscosity                               | No data available                        |
| Explosive properties                    | No data available                        |

| Oxidizing properties | No data available |
|----------------------|-------------------|
|                      |                   |
|                      |                   |

### Other safety information

No data available

## SECTION 10: Stability and reactivity

### Reactivity

No data available

### **Chemical stability**

No data available

Possibility of hazardous reactions

No data available

### Conditions to avoid

Light.

### Incompatible materials

Strong oxidizing agents

### Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx) Other decomposition products - No data available In the event of fire: see section 5

# SECTION 11: Toxicological information

### 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 sensitization  |
| No data available  |
| Germ cell mutagenicity Carcinogenicity   |
| IARC: No ingredient 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  |

### 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

### Toxicity

No data available

### Persistence and degradability

No data available

### **Bioaccumulative potential**

No data available

### Mobility in soil

No data available

### 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.

### Other adverse effects

No data available

### SECTION 13: Disposal considerations

### Waste treatment methods

#### Product

No data available

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

### **UN number**

ADR/RID: 3077 IMDG: 3077 IATA: 3077

### UN proper shipping name

ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (3-(4-

Aminophenyl)benzonitrile)

IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (3-(4-

Aminophenyl)benzonitrile)

IATA: Environmentally hazardous substance, solid, n.o.s.

| Aminophenyl)benzonitrile)<br>14.3     | (3-(4-        |
|---------------------------------------|---------------|
| Transport hazard class(es)            |               |
| ADR/RID: 9 IMDG: 9                    | IATA: 9       |
| Packaging group                       |               |
| ADR/RID: III IMDG: III                | IATA: III     |
| Environmental hazards                 |               |
| ADR/RID: yes IMDG Marine pollutant: y | ves IATA: yes |
| 14.6 Special precautions for user     |               |

Further information

EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.

### SECTION 15: Regulatory information

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

Regulations on the Safety Management of Hazardous Chemicals China Catalog of Hazardous chemicals 2015:Not Listed. website: https://www.mem.gov.cn/ Measures for Environmental Management of New Chemical Substances Vietnam National Chemical Inventory:Not Listed. website: https://chemicaldata.gov.vn/ United States Toxic Substances Control Act (TSCA) Inventory:Not Listed. website: https://www.epa.gov/ Philippines Inventory of Chemicals and Chemical Substances (PICCS):Not Listed. website: https://emb.gov.ph/ New Zealand Inventory of Chemicals (NZIoC):Not Listed. website: https://www.epa.govt.nz/ Korea Existing Chemicals List (KECL):Not Listed. website: http://ncis.nier.go.kr European Inventory of Existing Commercial Chemical Substances (EINECS):Not Listed. website: https://echa.europa.eu/ EC Inventory:Not Listed.

Chinese Chemical Inventory of Existing Chemical Substances (China IECSC):Not Listed. website: https://www.mee.gov.cn/

# **SECTION 16: Other information**

#### Abbreviations and acronyms

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

CAS: Chemical Abstracts Service

EC50: Effective Concentration 50%

- IATA: International Air Transportation Association
- IMDG: International Maritime Dangerous Goods

LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

RID: Regulation concerning the International Carriage of Dangerous Goods by Rail

STEL: Short term exposure limit

TWA: Time Weighted Average

#### References

[1] CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple

[2] ChemlDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp

- [3] ECHA European Chemicals Agency, website: https://echa.europa.eu/
- [4] eChemPortal The Global Portal to Information on Chemical Substances by OECD, website:

http://www.echemportal.org/echemportal/index?pageID=0&request\_locale=en

- [5] ERG Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/erg
- [6] Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp
- [7] HSDB Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm

[8] IARC - International Agency for Research on Cancer, website: http://www.iarc.fr/

[9] IPCS - The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home

[10] Sigma-Aldrich, website: https://www.sigmaaldrich.com/

**Disclaimer:** 

The information in this MSDS is only applicable to the specified product, unless otherwise specified, it is not applicable to the mixture of this product and other substances. This MSDS only provides information on the safety of the product for those who have received the appropriate professional training for the user of the product. Users of this MSDS must make independent judgments on the applicability of this SDS. The authors of this MSDS will not be held responsible for any harm caused by the use of this MSDS.