# Chemical Safety Data Sheet MSDS / SDS

# 4-lodobiphenyl

Revision Date: 2024-06-01 Revision Number: 1

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

#### **Product identifier**

 Product name
 : 4-lodobiphenyl

 CBnumber
 : CB0415307

 CAS
 : 1591-31-7

 EINECS Number
 : 216-469-1

Synonyms : 4-lodo-1,1'-biphenyl,4-lodobiphenyl

#### 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.

P391 Collect spillage. Hazardous to the aquatic environment

P501 Dispose of contents/container to.....

#### Hazard statements

H302 Harmful if swallowed

H318 Causes serious eye damage

H400 Very toxic to aquatic life

# SECTION 3: Composition/information on ingredients

#### **Substance**

Product name : 4-lodobiphenyl

Synonyms : 4-lodo-1,1'-biphenyl,4-lodobiphenyl

CAS : 1591-31-7
EC number : 216-469-1
MF : C12H9I
MW : 280.1

## 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, Hydrogen iodide

## Advice for firefighters

No data available

#### **Further information**

No data available

## **NFPA 704**



HEALTH 2

Intense or continued but not chronic exposure could cause temporary incapacitation or possible residual injury (e.g. diethyl

ether, ammonium phosphate, iodine)

|  | FIRE  | 1 | can occur. Includes some finely divided suspended solids that do not require heating before ignition can occur. Flash point at or above 93.3 °C (200 °F). (e.g. mineral oil, ammonia) |
|--|-------|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | REACT | 1 | Normally stable, but can become unstable at elevated temperatures and pressures (e.g. <u>propene</u> )                                                                                |
|  | SPEC. |   |                                                                                                                                                                                       |
|  | HAZ.  |   |                                                                                                                                                                                       |
|  |       |   |                                                                                                                                                                                       |

## 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

No data available

## 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: 110 - 114 °C |
| Initial boiling point and boiling range | 320°C(lit.)                       |
| 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: 5,058                    |
| 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**

No data available

## Incompatible materials

Oxidizing agents

## Hazardous decomposition products

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

No data available

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

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** 

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

# **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. (4-lodobiphenyl) IMDG: ENVIRONMENTALLY HAZARDOUS

SUBSTANCE, SOLID, N.O.S. (4-lodobiphenyl)

IATA: Environmentally hazardous substance, solid, n.o.s. (4-lodobiphenyl)

## 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: yes IATA: yes

## 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

Chinese Chemical Inventory of Existing Chemical Substances (China IECSC):Listed. website: https://www.mee.gov.cn/

EC Inventory:Listed.

European Inventory of Existing Commercial Chemical Substances (EINECS):Listed. website: https://echa.europa.eu/

Korea Existing Chemicals List (KECL):Listed. website: http://ncis.nier.go.kr

United States Toxic Substances Control Act (TSCA) Inventory:Listed. website: https://www.epa.gov/

New Zealand Inventory of Chemicals (NZIoC):Not Listed. website: https://www.epa.govt.nz/

Philippines Inventory of Chemicals and Chemical Substances (PICCS):Not Listed. website: https://emb.gov.ph/

Vietnam National Chemical Inventory:Not Listed. website: https://chemicaldata.gov.vn/

## 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

Chemical Book

7

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.