# Chemical Safety Data Sheet MSDS / SDS

# (S,S)-2,6-BIS(4-ISOPROPYL-2-OXAZOLIN-2-YL)PYRIDINE

Revision Date: 2023-12-07 Revision Number: 1

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

#### **Product identifier**

Product name : (S,S)-2,6-BIS(4-ISOPROPYL-2-OXAZOLIN-2-YL)PYRIDINE

CBnumber : CB7298752
CAS : 118949-61-4

Synonyms : 2,6-bis((S)-4-isopropyl-4,5-dihydrooxazol-2-yl)pyridine,(S,S)-iPr-PyBox

#### 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 Warning

# Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash hands thoroughly after handling.

P264 Wash skin thouroughly after handling.

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

H315 Causes skin irritation

H319 Causes serious eye irritation

H335 May cause respiratory irritation

# SECTION 3: Composition/information on ingredients

#### **Substance**

Product name : (S,S)-2,6-BIS(4-ISOPROPYL-2-OXAZOLIN-2-YL)PYRIDINE

Synonyms : 2,6-bis((S)-4-isopropyl-4,5-dihydrooxazol-2-yl)pyridine,(S,S)-iPr-PyBox

CAS : 118949-61-4 MF : C17H23N3O2

MW : 301.38

# SECTION 4: First aid measures

#### Description of first aid measures

#### If inhaled

After inhalation: fresh air.

#### In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

#### In case of eye contact

After eye contact: rinse out with plenty of water. Remove contact lenses.

#### If swallowed

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

### 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**

#### Extinguishing media

# Suitable extinguishing media

Water Foam Carbon dioxide (CO2) Dry powder

# Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

# Special hazards arising from the substance or mixture

Carbon oxides, Nitrogen oxides (NOx) Combustible.

Development of hazardous combustion gases or vapours possible in the event of fire.

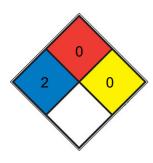
# Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.

#### **Further information**

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

### **NFPA 704**



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

HEALTH 2

ether, ammonium phosphate, iodine)

Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete,

- FIRE 0 stone, and sand. Materials that will not burn in air when exposed to a temperature of 820 °C (1,500 °F) for a period of 5 minutes.(e.g. Carbon tetrachloride)
- ☐ REACT 0 Normally stable, even under fire exposure conditions, and is not reactive with water (e.g. helium, №2)

SPEC.

# SECTION 6: Accidental release measures

# Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

# **Environmental precautions**

Do not let product enter drains.

### Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

#### 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

Tightly closed. Dry.

#### 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.

### **Exposure controls**

#### Appropriate engineering controls

Change contaminated clothing. Wash hands after working with substance.

#### Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm Break through time: 480 min

Material tested:KCL 741 Dermatril? L Splash contact Material: Nitrile rubber

Minimum layer thickness: 0,11 mm Break through time: 480 min

Material tested: KCL 741 Dermatril? L

Respiratory protection

required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Control of environmental exposure

Do not let product enter drains.

# SECTION 9: Physical and chemical properties

# Information on basic physicochemical properties

| Odour Threshold No data available  PH No data available  Melting point/freezing point Melting point/range: 155 - 157 °C - lit.  Initial boiling point and boiling range 457.1±30.0 °C (Predicted)  Flash point No data available  Evaporation rate No data available  Fianmability (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 No data available  Autoignition temperature No data available  Decomposition temperature No data available  Explosive properties No data available  Explosive properties No data available  No data available                        | Appearance                              | white powder                             |
|--|---|--|
| pH No data available  Melting point/freezing point Melting point/range: 155 - 157 °C - lit.  Initial boiling point and boiling range 457.1±30.0 °C(Predicted)  Flash point No data available  Evaporation rate No data available  Flammability (solid, gas) No data available  Upper/lower flammability or explosive Initial boiling range No data available  Upper/lower flammability or explosive No data available  Imits  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 No data available  Autoignition temperature No data available  Decomposition temperature No data available  Explosive properties No data available  Explosive properties No data available | Odour                                   | No data available                        |
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| Initial boiling point and boiling range 457.1±30.0 °C(Predicted)  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 No data available  Autoignition temperature No data available  Decomposition temperature No data available  Viscosity No data available  Explosive properties No data available   | рН                                      | 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 No data available  Autoignition temperature No data available  Decomposition temperature No data available  Viscosity No data available  Explosive properties No data available   | Melting point/freezing point            | Melting point/range: 155 - 157 °C - lit. |
| 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 No data available Autoignition temperature No data available Decomposition temperature No data available Viscosity No data available Explosive properties No data available  | Initial boiling point and boiling range | 457.1±30.0 °C(Predicted)                 |
| Flammability (solid, gas)  No data available  Upper/lower flammability or explosive Ilimits  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  Autoignition temperature  No data available  Decomposition temperature  No data available  Viscosity  No data available  Explosive properties  No data available   | Flash point                             | No data available                        |
| Upper/lower flammability or explosive 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 No data available  Autoignition temperature No data available  Decomposition temperature No data available  Viscosity No data available  Explosive properties No data available  | Evaporation rate                        | No data available                        |
| 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 No data available Autoignition temperature No data available Decomposition temperature No data available Viscosity No data available Explosive properties No data available  | Flammability (solid, gas)               | No data available                        |
| 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  No data available  Autoignition temperature  No data available  Decomposition temperature  No data available  Viscosity  No data available  Explosive properties  No data available   | Upper/lower flammability or explosive   | No data available                        |
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| Relative density  No data available  Water solubility  No data available  Partition coefficient: n-octanol/water  No data available  Autoignition temperature  No data available  Decomposition temperature  No data available  Viscosity  No data available  Explosive properties  No data available  | Vapour pressure                         | No data available                        |
| Water solubility No data available Partition coefficient: n-octanol/water No data available Autoignition temperature No data available Decomposition temperature No data available Viscosity No data available Explosive properties No data available  | Vapour density                          | No data available                        |
| Partition coefficient: n-octanol/water No data available  Autoignition temperature No data available  Decomposition temperature No data available  Viscosity No data available  Explosive properties No data available   | Relative density                        | No data available                        |
| Autoignition temperature  No data available  Decomposition temperature  No data available  Viscosity  No data available  Explosive properties  No data available   | Water solubility                        | No data available                        |
| Decomposition temperature  No data available  Viscosity  No data available  Explosive properties  No data available  | Partition coefficient: n-octanol/water  | No data available                        |
| Viscosity No data available  Explosive properties No data available  | Autoignition temperature                | No data available                        |
| Explosive properties No data available   | Decomposition temperature               | No data available                        |
|  | Viscosity                               | No data available                        |
| Oxidizing properties 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

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

### **Chemical stability**

The product is chemically stable under standard ambient conditions (room temperature) .

# Possibility of hazardous reactions

No data available

#### Conditions to avoid

no information available

# Incompatible materials

#### 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

Inhalation: 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

No data available

# **SECTION 13: Disposal considerations**

#### Waste treatment methods

#### **Product**

See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

# **SECTION 14: Transport information**

#### **UN** number

ADR/RID: - IMDG: - IATA: -

14.2 UN proper shipping name ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods

Transport hazard class(es) 14.3

ADR/RID: - IMDG: -

Packaging group

ADR/RID: - IMDG: -

Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

## Special precautions for user

### **Further information**

Not classified as dangerous in the meaning of transport regulations.

# SECTION 15: Regulatory information

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

Chemical Book 7

IATA: -

#### 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

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/

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

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

Korea Existing Chemicals List (KECL):Not Listed. website: http://ncis.nier.go.kr

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

European Inventory of Existing Commercial Chemical Substances (EINECS): Not Listed. website: https://echa.europa.eu/

EC Inventory:Not Listed.

# SECTION 16: Other information

#### Abbreviations and acronyms

CAS: Chemical Abstracts Service

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

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

IMDG: International Maritime Dangerous Goods

IATA: International Air Transportation Association

TWA: Time Weighted Average

STEL: Short term exposure limit

LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

EC50: Effective Concentration 50%

### References

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

 $\hbox{\hbox{$\tt [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.