## Chemical Safety Data Sheet MSDS / SDS

## **BIS(METHYLCYCLOPENTADIENYL)NICKEL**

Revision Date:2025-02-01 Revision Number:1

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

## **Product identifier**

| Product name  | : BIS(METHYLCYCLOPENTADIENYL)NICKEL   |  |  |  |  |  |
|---|---|--|--|--|--|--|
| CBnumber  | : CB7286841   |  |  |  |  |  |
| CAS   | : 1293-95-4   |  |  |  |  |  |
| Synonyms  | $: {\sf Bis} (methylcyclopentadienyl) {\sf nickel} ({\sf II}), {\sf BIS} ({\sf METHYLCYCLOPENTADIENYL}) {\sf NICKEL}$ |  |  |  |  |  |
| 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)WarningSignal wordWarningPrecautionary statementsP261 Avoid breathing dust/fume/gas/mist/vapours/spray.P280 Wear protective gloves/protective clothing/eye protection/face protection.P304+P340 IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.P321 Specific treatment (see ... on this label).Hazard statementsH302 Harmful if swallowedH312 Harmful in contact with skin

H332 Harmful if inhaled

## SECTION 3: Composition/information on ingredients

### Substance

| Product name | : BIS(METHYLCYCLOPENTADIENYL)NICKEL                                       |
|--------------|---|
| Synonyms     | : Bis(methylcyclopentadienyl)nickel(II),BIS(METHYLCYCLOPENTADIENYL)NICKEL |
| CAS          | : 1293-95-4   |
| MF           | : C12H14Ni10*   |
| MW           | : 216.93  |
|              |   |

## SECTION 4: First aid measures

## Description of first aid measures

#### General advice

Consult a physician. Show this material safety data sheet to the doctor in attendance.

#### lf inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Flush eyes with water as a precaution.

### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 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

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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

Carbon oxides Nickel/nickel oxides

#### Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

## **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. <u>diethyl</u> <u>ether</u> , ammonium phosphate, iodine)   |
|---------------|---|--|
| FIRE          | 1 | Materials that require considerable preheating, under all ambient temperature conditions, before ignition and combustion 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         | 0 | Normally stable, even under fire exposure conditions, and is not reactive with water (e.g. helium, <u>N2</u> )   |
| SPEC.<br>HAZ. |   |  |

## SECTION 6: Accidental release measures

## Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

For personal protection see section 8.

#### **Environmental precautions**

Do not let product enter drains.

## Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

### Reference to other sections

For disposal see section 13.

## SECTION 7: Handling and storage

## Precautions for safe handling

## Advice on safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.

#### **Hygiene measures**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

For precautions see section 2.2.

### Conditions for safe storage, including any incompatibilities

## Storage conditions

Keep container tightly closed in a dry and well-ventilated place. Store in cool place.

#### Storage stability

Recommended storage temperature 2 - 8 °C

Air sensitive. Store under inert gas.

### 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**

#### Personal protective equipment

#### Eye/face protection

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

#### Skin protection

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. Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### **Respiratory protection**

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).

Control of environmental exposure

Do not let product enter drains.

## SECTION 9: Physical and chemical properties

## Information on basic physicochemical properties

| Appearance                              | dark green liquid   |
|---|---|
| Odour                                   | No data available   |
| Odour Threshold                         | No data available   |
| pH                                      | No data available   |
| Melting point/freezing point            | Melting point/range: 34 - 36 °C - lit.  |
| Initial boiling point and boiling range | 85 - 90 °C at 1 hPa - lit.  |
| Flash point                             | 66 °C - closed cup  |
| 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 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                               | Viscosity, kinematic: No data available Viscosity, dynamic: 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**

Stable under recommended storage conditions.

## Possibility of hazardous reactions

No data available

## Conditions to avoid

Air sensitive.

### Incompatible materials

Strong oxidizing agents

### Hazardous decomposition products

## **SECTION 11: Toxicological information**

### Information on toxicological effects

Acute toxicity Oral LC50 Inhalation - 4 h - 1,5 mg/l (Acute toxicity estimate) LD50 Dermal - 1.100 mg/kg 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 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

## **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

Offer surplus and non-recyclable solutions to a licensed disposal company. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

### **Contaminated packaging**

Dispose of as unused product.

## **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

| Special precautions for user   |          |
|--|----------|
| Environmental hazards<br>14.5<br>ADR/RID: no IMDG Marine pollutant: no | IATA: no |
| Packaging group<br>14.4<br>ADR/RID: - IMDG: -                          | IATA: -  |
| Transport hazard class(es)<br>14.3<br>ADR/RID: - IMDG: -               | IATA: -  |

#### 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

#### **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/ Korea Existing Chemicals List (KECL):Not Listed. website: http://ncis.nier.go.kr Chinese Chemical Inventory of Existing Chemical Substances (China IECSC):Not Listed. website: https://www.mee.gov.cn/ EC Inventory:Not Listed. European Inventory of Existing Commercial Chemical Substances (EINECS):Not Listed. website: https://echa.europa.eu/

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/

## **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
- [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.