# Chemical Safety Data Sheet MSDS / SDS

# DICYCLOPENTYLPHOSPHINE

Revision Date:2023-04-29 Revision Number:1

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

#### **Product identifier**

| Product name  | : DICYCLOPENTYLPHOSPHINE   |  |
|---|--|--|
| CBnumber  | : CB9244768  |  |
| CAS   | : 39864-68-1   |  |
| Synonyms  | : dicyclopentylphosphine   |  |
| 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

#### Classification of the substance or mixture

Flammable liquids, Category 2

Pyrophoric liquids, Category 1

Acute toxicity - Category 3, Oral

Acute toxicity - Category 3, Dermal

Acute toxicity - Category 3, Inhalation

#### Label elements

#### Pictogram(s)

Signal word

Danger

#### Hazard statement(s)

H225 Highly Flammable liquid and vapour

H250 Catches fire spontaneously if exposed to air

H301 Toxic if swalloed

H311 Toxic in contact with skin

H331 Toxic if inhaled

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#### Precautionary statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P222 Do not allow contact with air.

P231 Handle under inert gas.

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

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

P422 Store contents under ...

#### Prevention

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

P240 Ground and bond container and receiving equipment.

P241 Use explosion-proof [electrical/ventilating/lighting/...] equipment.

P242 Use non-sparking tools.

P243 Take action to prevent static discharges.

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

P222 Do not allow contact with air.

P231+P232 Handle and store contents under inert gas/....Protect from moisture.

P264 Wash ... thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

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

P271 Use only outdoors or in a well-ventilated area.

#### Response

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse affected areas with water [or shower].

P370+P378 In case of fire: Use ... to extinguish.

P302+P334 IF ON SKIN: Immerse in cool water or wrap in wet bandages.

P301+P316 IF SWALLOWED: Get emergency medical help immediately.

P321 Specific treatment (see ... on this label).

P330 Rinse mouth.

P302+P352 IF ON SKIN: Wash with plenty of water/...

P316 Get emergency medical help immediately.

P361+P364 Take off immediately all contaminated clothing and wash it before reuse.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

#### Storage

P403+P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

#### Disposal

P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

#### Other hazards

no data available

# SECTION 3: Composition/information on ingredients

#### Substance

| : DICYCLOPENTYLPHOSPHINE |
|--------------------------|
| : dicyclopentylphosphine |
| : 39864-68-1             |
| : C10H19P                |
| : 170.23                 |
|                          |

## SECTION 4: First aid measures

#### Description of first aid measures

#### lf inhaled

Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a doctor immediately. Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.

#### Following skin contact

Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a doctor.

#### Following eye contact

Rinse with pure water for at least 15 minutes. Consult a doctor.

#### Following ingestion

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center immediately.

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

no data available

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

no data available

## **SECTION 5: Firefighting measures**

#### **Extinguishing media**

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

#### **Specific Hazards Arising from the Chemical**

no data available

#### Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

## SECTION 6: Accidental release measures

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

Avoid dust formation. Avoid breathing mist, gas or vapours. Avoid contacting with skin and eye. Use personal protective equipment. Wear chemical impermeable gloves. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

#### **Environmental precautions**

Prevent further spillage or leakage if it is safe to do so. Do not let the chemical enter drains. Discharge into the environment must be avoided.

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

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use sparkproof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

# SECTION 7: Handling and storage

#### Precautions for safe handling

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

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

Store the container tightly closed in a dry, cool and well-ventilated place. Store apart from foodstuff containers or incompatible materials.

### SECTION 8: Exposure controls/personal protection

#### **Control parameters**

#### **Occupational Exposure limit values**

no data available

#### **Biological limit values**

no data available

#### **Exposure controls**

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the riskelimination area.

#### Individual protection measures

#### Eye/face protection

Wear tightly fitting safety goggles with side-shields conforming to EN 166(EU) or NIOSH (US).

#### Skin protection

Wear fire/flame resistant and impervious clothing. Handle with gloves. Gloves must be inspected prior to use. Wash and dry hands. The

selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

#### **Respiratory protection**

If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.

no data available

# SECTION 9: Physical and chemical properties

#### Information on basic physicochemical properties

| Odourno data availableMelting point/freezing pointno data availableBoiling point or initial boiling point and<br>boiling range76-78°C/0.8mmHgFlammabilityno data availableLower and upper explosionno data availableIimit/flammability limitno data availableFlash point<-25°CAuto-ignition temperatureno data availablepHno data availableKinematic viscosityno data availableSolubilityno data availablePartition coefficient n-octanol/waterno data availablePartition coefficient n-octanol/waterno data availableDensity and/or relative density0.933g/mLat 25°CRelevenceno data availableDensity evopur densityno data available | Physical state                             | liquid            |
|--|--|-------------------|
| Melling point/freezing pointno data availableBoiling point or initial boiling point and<br>boiling range76-78°C/0.8mmHgFlammabilityno data availableLower and upper explosionno data availableLower and upper explosionno data availableIimit/flammability limit<-25°C   | Colour                                     | colorless         |
| Boiling point or initial boiling point and boiling range   76-78°C/0.8mmHg     Flammability   no data available     Lower and upper explosion   no data available     Lower and upper explosion   no data available     Limit/flammability limit   -<25°C  | Odour                                      | no data available |
| boiling rangeFlammabilityno data availableLower and upper explosionno data availablelimit/flammability limitFlash point<-25°C  | Melting point/freezing point               | no data available |
| Flammabilityno data availableLower and upper explosionno data availablelimit/flammability limitFlash point<-25°C   | Boiling point or initial boiling point and | 76-78°C/0.8mmHg   |
| Lower and upper explosionno data availablelimit/flammability limitFlash point<-25°C  | boiling range                              |                   |
| Iimit/flammability limitFlash point<-25°C  | Flammability                               | no data available |
| Flash point<-25°CAuto-ignition temperatureno data availableDecomposition temperatureno data availablepHno data availableKinematic viscosityno data availableSolubilityno data availablePartition coefficient n-octanol/waterno data availableVapour pressureno data availableDensity and/or relative density0.933g/mLat 25°CRelative vapour densityno data available   | Lower and upper explosion                  | no data available |
| Auto-ignition temperatureno data availableDecomposition temperatureno data availablepHno data availableKinematic viscosityno data availableSolubilityno data availablePartition coefficient n-octanol/waterno data availableVapour pressureno data availableDensity and/or relative density0.933g/mLat 25°CRelative vapour densityno data available  | limit/flammability limit                   |                   |
| Decomposition temperatureno data availablepHno data availableKinematic viscosityno data availableSolubilityno data availablePartition coefficient n-octanol/waterno data availableVapour pressureno data availableDensity and/or relative density0.933g/mLat 25°CRelative vapour densityno data available  | Flash point                                | <-25°C            |
| pHno data availableKinematic viscosityno data availableSolubilityno data availablePartition coefficient n-octanol/waterno data availableVapour pressureno data availableDensity and/or relative density0.933g/mLat 25°CRelative vapour densityno data available  | Auto-ignition temperature                  | no data available |
| Kinematic viscosityno data availableSolubilityno data availablePartition coefficient n-octanol/waterno data availableVapour pressureno data availableDensity and/or relative density0.933g/mLat 25°CRelative vapour densityno data available   | Decomposition temperature                  | no data available |
| Solubilityno data availablePartition coefficient n-octanol/waterno data availableVapour pressureno data availableDensity and/or relative density0.933g/mLat 25°CRelative vapour densityno data available   | pH   | no data available |
| Partition coefficient n-octanol/water   no data available     Vapour pressure   no data available     Density and/or relative density   0.933g/mLat 25°C     Relative vapour density   no data available   | Kinematic viscosity                        | no data available |
| Vapour pressure no data available   Density and/or relative density 0.933g/mLat 25°C   Relative vapour density no data available   | Solubility                                 | no data available |
| Density and/or relative density 0.933g/mLat 25°C   Relative vapour density no data available   | Partition coefficient n-octanol/water      | no data available |
| Relative vapour density no data available  | Vapour pressure                            | no data available |
|  | Density and/or relative density            | 0.933g/mLat 25°C  |
| Particle characteristics no data available   | Relative vapour density                    | no data available |
|  | Particle characteristics                   | 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

#### Hazardous decomposition products

no data available

### SECTION 11: Toxicological information

#### Acute toxicity

- Oral: no data available
- Inhalation: no data available
- Dermal: no data available

#### Skin corrosion/irritation

no data available

#### Serious eye damage/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

#### STOT-single exposure

no data available

#### STOT-repeated exposure

no data available

#### Aspiration hazard

no data available

# SECTION 12: Ecological information

#### Toxicity

Toxicity to fish: no data available

Toxicity to daphnia and other aquatic invertebrates: no data available

Toxicity to algae: no data available

Toxicity to microorganisms: no data available

#### Persistence and degradability

no data available

#### Bioaccumulative potential

no data available

#### Mobility in soil

no data available

#### Other adverse effects

no data available

### **SECTION 13: Disposal considerations**

#### **Disposal methods**

#### Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

#### Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

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

#### **UN Number**

ADR/RID: UN2845 (For reference only, please check.) IMDG: UN2845 (For reference only, please check.) IATA: UN2845 (For reference only, please check.)

#### **UN Proper Shipping Name**

ADR/RID: PYROPHORIC LIQUID, ORGANIC, N.O.S. (For reference only, please check.) IMDG: PYROPHORIC LIQUID, ORGANIC, N.O.S. (For reference only, please check.) IATA: PYROPHORIC LIQUID, ORGANIC, N.O.S. (For reference only, please check.)

#### Transport hazard class(es)

ADR/RID: 4.2 (For reference only, please check.) IMDG: 4.2 (For reference only, please check.) IATA: 4.2 (For reference only, please check.)

#### Packing group, if applicable

ADR/RID: I (For reference only, please check.) IMDG: I (For reference only, please check.) IATA: I (For reference only, please check.)

#### **Environmental hazards**

ADR/RID: No IMDG: No IATA: No

# Special precautions for user

no data available

#### Transport in bulk according to IMO instruments

no data available

# **SECTION 15: Regulatory information**

#### Safety, health and environmental regulations specific for the product in question

European Inventory of Existing Commercial Chemical Substances (EINECS)

Not Listed.

EC Inventory

Not Listed.

United States Toxic Substances Control Act (TSCA) Inventory

Not Listed.

China Catalog of Hazardous chemicals 2015

Not Listed.

New Zealand Inventory of Chemicals (NZIoC)

Not Listed.

PICCS

Not Listed.

Vietnam National Chemical Inventory

Not Listed.

IECSC

Not Listed.

Korea Existing Chemicals List (KECL)

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

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

HSDB - Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm

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

eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: http://www.echemportal.org/echemportal/index?

pageID=0&request\_locale=en

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

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

ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/erg

Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp

ECHA - European Chemicals Agency, website: https://echa.europa.eu/

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