# Chemical Safety Data Sheet MSDS / SDS

# Dichlorodiphenylsilane

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

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

#### **Product identifier**

Product name : Dichlorodiphenylsilane

CBnumber : CB8210401

CAS : 80-10-4

EINECS Number : 201-251-0

Synonyms: 80-10-4, dichlorodiphenyl silane

### 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 : 010-86108875

# SECTION 2: Hazards identification

# GHS Label elements, including precautionary statements

Symbol(GHS)



Signal word Danger

## Precautionary statements

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

Continuerinsina.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.

P302+P350 IF ON SKIN: Gently wash with plenty of soap and water.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

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

P264 Wash skin thouroughly after handling.

P264 Wash hands thoroughly after handling.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P234 Keep only in original container.

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

P406 Store in corrosive resistant/... container with a resistant inner liner.

P405 Store locked up.

P390 Absorb spillage to prevent material damage.

P310 Immediately call a POISON CENTER or doctor/physician.

#### **Hazard statements**

H318 Causes serious eye damage

H314 Causes severe skin burns and eye damage

H310 Fatal in contact with skin

H302 Harmful if swallowed

H290 May be corrosive to metals

# SECTION 3: Composition/information on ingredients

#### **Substance**

Product name : Dichlorodiphenylsilane

Synonyms : 80-10-4,dichlorodiphenylsilane

CAS : 80-10-4

EC number : 201-251-0

MF : C12H10Cl2Si

MW : 253.2

# 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.

## If inhaled

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

# In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

# If swallowed

Do NOT induce vomiting. 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, Hydrogen chloride gas, silicon oxides

#### Advice for firefighters

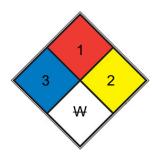
Wear self-contained breathing apparatus for firefighting if necessary.

#### **Further information**

No data available

REACT

#### **NFPA 704**



Short exposure could cause serious temporary or moderate residual injury (e.g. <u>liquid hydrogen, sulfuric acid, calcium hypochlorite</u>, hexafluorosilicic acid)

Materials that require considerable preheating, under all ambient temperature conditions, before ignition and combustion

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)

Undergoes violent chemical change at elevated temperatures and pressures, reacts violently with water, or may form 2 explosive mixtures with water (e.g. white phosphorus, potassium, sodium)

SPEC.

HAZ.

# SECTION 6: Accidental release measures

# Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8.

## **Environmental precautions**

Prevent further leakage or spillage if safe to do so. 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

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. For precautions see section 2.2.

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

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in cool place.

Moisture 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**

## Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

#### Personal protective equipment

Eye/face protection

Tightly fitting safety goggles. Faceshield (8-inch minimum). 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

Chemical Book

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

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

# SECTION 9: Physical and chemical properties

# Information on basic physicochemical properties

| Appearance                              | colorless clear                   |
|---|-----------------------------------|
| Odour                                   | No data available                 |
| Odour Threshold                         | No data available                 |
| рН                                      | No data available                 |
| Melting point/freezing point            | -22 °C                            |
| Initial boiling point and boiling range | 305 °C - lit.                     |
| Flash point                             | 142 °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                         | 2,7 hPa at 125 °C                 |
| Vapour density                          | >1 (vs air)                       |
| Relative density                        | 1,204 g/mL at 25 °C               |
| Water solubility                        | Decomposes in contact with water. |
| 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                 |
| 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**

Exposure to moisture. Do not allow water to enter container.

# Incompatible materials

Strong oxidizing agents, Bases

# Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen chloride gas, silicon oxides

Other decomposition products - No data available In the event of fire: see section 5

# **SECTION 11: Toxicological information**

# Information on toxicological effects

#### **Acute toxicity**

LD50 Dermal - Rabbit - 120 mg/kg

#### Skin corrosion/irritation

Skin - Rabbit

Result: Skin irritation (Draize Test)
Remarks: Moderate skin irritation

## Serious eye damage/eye irritation

Eyes - Rabbit

Result: Severe eye irritation (Draize Test)

# 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: W3190000

# **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: 1769 IMDG: 1769 IATA: 1769

# **UN proper shipping name**

ADR/RID: DIPHENYLDICHLOROSILANE IMDG: DIPHENYLDICHLOROSILANE

IATA: Diphenyldichlorosilane

Passenger Aircraft: Not permitted for transport

| 14.3 | 1 3             | Transport hazard class(es)            |          |
|------|-----------------|---------------------------------------|----------|
|      | <del>1</del> .0 | ADR/RID: 8 IMDG: 8                    | IATA: 8  |
| 14.4 | 4.4             | Packaging group                       |          |
|      | <del>1.1</del>  | ADR/RID: II IMDG: II                  | IATA: II |
| 14.5 | 4.5             | Environmental hazards                 |          |
|      | <del>1</del> .0 | ADR/RID: no IMDG Marine pollutant: no | IATA: no |
| 14.6 | 4.6             | Special precautions for user          |          |
|      | T.U             | No data available                     |          |
|      |                 |                                       |          |

# **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:Listed. website: https://www.mem.gov.cn/

#### Measures for Environmental Management of New Chemical Substances

EC Inventory:Listed.

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

Vietnam National Chemical Inventory:Listed. website: https://chemicaldata.gov.vn/

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

Philippines Inventory of Chemicals and Chemical Substances (PICCS):Listed. website: https://emb.gov.ph/

New Zealand Inventory of Chemicals (NZloC):Listed. website: https://www.epa.govt.nz/

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

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

# 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.