

SAFETY DATA SHEET

According to 1907/2006/EC, article 31 (REACH) and Regulation (EU) No. 2020/878

Creation date: 20230821

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SDS No: 2023082107

Version: 1.0

Polydimethylsiloxane

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

1.1 Product identifier

| | |
|-----------------------|----------------------|
| Product name | Polydimethylsiloxane |
| Synonyms, trade names | HENGDA-FM10000 |

1.2 Relevant identified uses of the substance or mixture and uses advised against

| | |
|--------------------------|--------------------------|
| Relevant identified uses | Industrial. |
| Uses advised against | No information available |

1.3 Details of the supplier of the safety data sheet

1.3.1 Details of the Manufacturer

| | |
|-------------|--|
| Name | Qingdao Hengda New Material Technology Co., Ltd. |
| Address | Qingdao International Innovation Park, Qingdao, China. |
| Postal code | 266101 |
| Telephone | +86-0532-66750551 |
| Fax | +86-0532-66750552 |
| E-mail | Info@hengdasilane.com |

1.4 Emergency telephone

| | |
|---------------------|-------------------|
| Emergency telephone | +86-0532-66750551 |
|---------------------|-------------------|

2. HAZARDS IDENTIFICATION

2.1 Classification of substance or mixture according to Regulation (EC) 1272/2008 [CLP]

Not classified.

2.2 Label elements according to Regulation (EC) 1272/2008 [CLP]

| | |
|--------------|----------------|
| Pictogram(s) | No pictogram |
| Signal word | No signal word |

Hazard statements

No information available.

| Precautionary statements**Prevention**

No information available.

Response

No information available.

Storage

No information available.

Disposal

No information available.

Supplemental Hazard information (EU)

Not applicable.

2.3 Other hazards

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS**3.1 Substance**

| Name | Product designation | Content (weight percentage, %) | Classification according to Regulation (EC) 1272/2008 [CLP] | Specific Concentration limits, M-Factors, Acute Toxicity Estimates (ATE) |
|----------------------|--|--------------------------------|---|--|
| Polydimethylsiloxane | CAS nr: 63148-62-9 EC nr: 613-156-5 | ≥ 98% | Not classified. | / |

3.2 Mixture

Not applicable.

4. FIRST-AID MEASURES**4.1 Description of first aid measures**

| | |
|---------------------------|-------------------------------|
| Note to physicians | Treat symptomatically. |
| Eye contact | Immediately flush with water |
| Skin contact | No first aid should be needed |
| Ingestion | Get medical attention |
| Inhalation | No first aid should be needed |

4.2 Most important symptoms and effects, both acute and delayed

No data available.

4.3 Indication of any immediate medical attention and special treatment needed

Hazards: No data available.

Treatment: Get medical attention immediately. If swallowed, do NOT induce vomiting. Give a glass of water.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

| | |
|-------------------|------------------------------------|
| Suitable | Dry chemical, foam or water spray. |
| Unsuitable | None established. |

5.2 Special hazards arising from the substances or mixture

Silicones dioxide, carbon oxides and traces of incompletely burned carbon compounds.

5.3 Advice for firefighters

Special fire fighting procedures: Take precautionary measures against static discharges. To prevent and minimize fire or explosion risk from static accumulation and discharge, effectively bond and/or ground product transfer system.

Special protective equipment for fire-fighters: Wear self-contained breathing apparatus and protective clothing.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid eye contact. Do not take internally.

6.2 Environmental precautions

Prevent from spreading or entering into drains or rivers.

6.3 Methods and materials for containment and cleaning up

Recovered material in appropriate container. Clean or remaining materials from spill with suitable absorbent. Clean area as appropriate since spilled materials. Final cleaning may require use of steam, solvents or detergents. Dispose of saturated absorbent or cleaning materials appropriately, since spontaneous heating may occur. Laws and regulations may apply to release and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which laws and regulations are applicable.

6.4 Reference to other sections

Remove sources of ignition. In case of spills, beware of slippery floors and surfaces. See Section 8 of the SDS for Personal Protective Equipment. Collect and dispose of spillage as indicated in section 13 of the SDS.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Use with the adequate ventilation. Avoid eye contact. Do not take internally. Exercise good industrial hygiene practice. Wash after handling, especially before eating and smoking.

7.2 Conditions for safe storage, including any incompatibilities

Use reasonable care and store away from oxidizing materials.

7.3 Special end use(s)

No information available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters**Occupational Exposure limit values**

| Component | Country | Occupational exposure limits | |
|----------------------|---------|------------------------------|------------|
| | | Eight hours | Short term |
| Polydimethylsiloxane | - | - | - |

8.2 Appropriate engineering controls

Local Ventilation: None should be needed

General Ventilation: Recommended

8.3 Individual protection measures, such as personal protective equipment (PPE)

| | |
|-------------------------|---|
| Hand protection | No special protection needed |
| Eye protection | Use proper protection-safety glasses as a minimum |
| Hygiene measures | Exercise good industrial hygiene practice. Wash after handling, especially before eating, drinking or smoking |
| Skin protection | Washing at mealtime and end of shift is adequate |
| Respiratory | No respiratory protection should be needed |
| Thermal hazard | No information available |

8.4 Restrictions environmental exposure

No information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

| | |
|---|-----------------------------------|
| Appearance | Transparent liquid |
| Color | Colorless. |
| Odour | No data available |
| Odour threshold | No information available |
| pH | No information available |
| Melting/freezing point | No information available |
| Initial boiling point and boiling range | No information available |
| Flash point | >315°C |
| Evaporation rate | No information available |
| Flammability | No information available |
| Lower and upper explosion limit/flammability limit | No information available |
| Vapour pressure | No information available |
| Vapour density(air=1) | No information available |
| Density(water=1) | 0.975 |
| Bulk density | No information available |
| Solubility | Soluble in the solvent of alkane. |
| Partition coefficient n-octanol/water | No information available |
| Auto-ignition temperature | No information available |
| Decomposition temperature | No information available |
| Viscosity | No information available |
| Explosive properties | No |
| Oxidising properties | No |

9.2 Other information

9.2.1. Information with regard to physical hazard classes

No information available.

9.2.2. Other safety characteristics

No information available.

10. STABILITY AND REACTIVITY**10.1 Reactive**

None.

10.2 Chemical stability

Stable.

10.3 Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4 Conditions to avoid

None.

10.5 Incompatible materials

Strong oxidizing material can cause a reaction.

10.6 Hazardous decomposition products

Silicone dioxide, Carbon oxides and traces of incompletely burned carbon

11. TOXICOLOGICAL INFORMATION**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute toxicity**

| Component | Oral | Dermal | Inhalation |
|----------------------|------|--------|------------|
| Polydimethylsiloxane | - | - | - |

Carcinogenicity

| Component | IARC | NTP |
|----------------------|------|-----|
| Polydimethylsiloxane | - | - |

Other

| Endpoint | Component | Toxicological Information |
|--------------------------------------|----------------------|---------------------------|
| Skin corrosion/irritation | Polydimethylsiloxane | No skin irritation. |
| Serious eye damage/irritation | Polydimethylsiloxane | No information available. |
| Skin sensitisation | Polydimethylsiloxane | No skin sensitization. |
| Respiratory sensitization | Polydimethylsiloxane | No sensitization. |
| Reproductive toxicity | Polydimethylsiloxane | No information available. |
| STOT-single exposure | Polydimethylsiloxane | No information available. |
| STOT-repeated exposure | Polydimethylsiloxane | No information available. |
| Aspiration hazard | Polydimethylsiloxane | No information available. |
| Germ cell mutagenicity | Polydimethylsiloxane | No information available. |

11.2 Information on other hazards

No information available.

12. ECOLOGICAL INFORMATION**12.1 Toxicity**

| Component | Fish | Aquatic invertebrates | Aquatic algae and cyanobacteria |
|----------------------|------|-----------------------|---------------------------------|
| Polydimethylsiloxane | - | - | - |

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

No bioaccumulation potential.

12.4 Mobility in soil

No information available

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods**

Product: Dispose of in accordance with local regulations.
 Contaminated packaging: D Dispose of in accordance with local regulations

14. TRANSPORT INFORMATION

| | |
|-----------------------------------|-----------------------------------|
| Transport pictograph | No information available |
| Transport | Classification |
| Land transport (ADR/RID) | |
| UN Number | Not classified as dangerous goods |
| UN proper shipping name | No information available |
| Transport hazard class(es) | No information available |
| Packing group | No information available |
| Classification code | No information available |
| Marine transport (IMDG) | |
| UN Number | Not classified as dangerous goods |
| UN proper shipping name | No information available |
| Transport hazard class(es) | No information available |

| | |
|-------------------------------------|-----------------------------------|
| Packing group | No information available |
| EMS No. | No information available |
| Remarks | No information available |
| Air transport (ICAO/IATA) | |
| UN Number | Not classified as dangerous goods |
| UN proper shipping name | No information available |
| Transport hazard class(es) | No information available |
| Packing group | No information available |
| Classification code | No information available |
| Environmental hazards | No information available |
| Special precautions for user | No information available |

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture International Chemical Inventory

| Component | EINECS | TSCA | DSL/N DSL | IECSC | NZIoC | PICCS | KECI | AICS |
|----------------------|--------|------|--------------|-------|-------|-------|------|------|
| Polydimethylsiloxane | - | - | - | - | - | - | - | - |

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

Note

| | |
|-----------------|--|
| EINECS | European Inventory of Existing Commercial Chemical Substances. |
| TSCA | United States Toxic Substances Control Act Inventory. |
| DSL/NDSL | Canadian Domestic/Non-domestic Substances List. |
| IECSC | Inventory of Existing Chemical Substances in China |
| NZIoC | New Zealand Inventory of Chemicals. |
| PICCS | Philippines Inventory of Chemicals and Chemical Substances. |
| KECI | Korea Existing Chemicals Inventory |
| AICS | Australia Inventory of Chemical Substances. |

16. OTHER INFORMATION

| | |
|--------------------------------|--|
| Issued By | Qingdao Hengda New Material Technology Co., Ltd. |
| Revision Date | 2023/08/22 |
| Reason for modification | - |

REFERENCE

- [1] IPCS - The International Chemical Safety Cards (ICSC),
website: <http://www.ilo.org/dyn/icsc/showcard.home>
- [2] HSDB - Hazardous Substances Data Bank, website: <https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm>
- [3] IARC - International Agency for Research on Cancer, website: <http://www.iarc.fr/>
- [4] eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website:
<https://www.echemportal.org/echemportal/substance-search>
- [5] CAMEO Chemicals, website: <http://cameochemicals.noaa.gov/search/simple>
- [6] US National Institutes of Health: Pubchem, website: <https://pubchem.ncbi.nlm.nih.gov/>

- [7] ChemIDplus, website: <https://www.nlm.nih.gov/databases/download/chemidplus.html>
[8] ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: <http://www.phmsa.dot.gov/hazmat/library/erg>
[9] Germany GESTIS-database on hazard substance, website: <https://gestis-database.dguv.de/>
[10] ECHA - European Chemicals Agency, website: <https://echa.europa.eu/>

ABBREVIATIONS AND ACRONYMS

CAS: Chemical Abstracts Service
ADR: 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%

STATEMENT

This safety technical specification (SDS) is prepared according to Regulation (EC) No 1907/2006 and Regulation (EU) No 2020/878. The data collected are from authoritative international databases and provided by enterprises themselves. Other information is based on our current state of knowledge. We try to make sure all the information is correct. However, due to the diversity of information sources and the limitations of our knowledge, this document is for user reference only. Users should make independent judgments about the suitability of this information for their specific purposes. We are not liable for any loss, damage or expense arising from or in connection with the handling, storage, use or disposal of the Products.

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