

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-FM500

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
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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	<-22°C
Initial boiling point and boiling range	>65°C
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)	0.97
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 (mm²/s)	450-550
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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