

DOW CORNING(R) HIGH VACUUM GREASE

1. IDENTIFICATION OF THE PRODUCT AND OF THE COMPANY

1.1	Product Name:	DOW CORNING(R) HIGH VACUUM GREASE		
1.2	Product Code:	01018817		
1.3	Chemical Classification:	Silicone compound		
1.4	Recommended Product Usage and Limited Use:	Lubricant		
1.5	Company Details			
	Manufacturer/Supplier:	Dow Corning (China) Holding Company Limited		
	Address:	1077 Zhangheng Road, Zhangjiang Hi-Tech Park, Shanghai, P.R.C, Postal Code: 201203		
	Telephone Number:	400 880 7110	Fax Number:	(86 21) 50796552
	Email Address:	China.info@dowcorning.com		
	Emergency Telephone Number:	(86 512) 56732049		
1.6	First Issuing Date:	2010/02/12		

2. HAZARD IDENTIFICATION

2.1	Hazard Classification:	Not hazardous.		
2.2	Label Elements Including Precautionary Statements			
	Symbol:	None.		
	Signal Word:	None.		
	Hazard Risk Statement:	Not hazardous.		
	Precautionary Statement:	Avoid contact with skin and eyes. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN: Wash with plenty of soap and water.		
2.3	Other Hazard:	None known.		

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1	Chemical characterization:	Mixture		
3.2	Hazardous Ingredients			
	<u>Chemical Name</u>	<u>CAS No.</u>	<u>% (w/w)</u>	
	Octamethylcyclotetrasiloxane	556-67-2	<1	

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4. FIRST AID MEASURES

4.1 First Aid Measures

Eyes:	Immediately flush with water.
Skin:	No first aid should be needed.
Inhalation:	No first aid should be needed.
Oral:	Get medical attention.
Comments:	Treat symptomatically.

4.2 **Important Symptoms and Hazard Effects:** No significant adverse effects from normal use.

4.3 Personal Protection for First Aid or Rescue Personnel

Respiratory Protection:	No respiratory protection should be needed.
Eye Protection:	Use proper protection - safety glasses as a minimum.
Skin Protection:	Washing at mealtime and end of shift is adequate.

4.4 **Note to physicians:** Treat symptomatically. For further information, the medical practitioner should contact Dow Corning (China) Holding Company Limited.

5. FIRE-FIGHTING MEASURES

- 5.1 **Suitable Extinguishing Media:** On large fires use dry chemical, foam or water spray. On small fires use carbon dioxide (CO₂), dry chemical or water spray. Water can be used to cool fire exposed containers.
- 5.2 **Unsuitable Extinguishing Media:** None established.
- 5.3 **Specific Hazards:** None.
- 5.4 **Special Fire Fighting Procedures:** Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool.
- 5.5 **Special protective equipment for the Fire Fighters:** Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals.

6. ACCIDENTAL RELEASE MEASURES

- 6.1 **Personal Precautions:** Avoid eye contact. Do not take internally.
- 6.2 **Environmental Precautions:** Do not allow large quantities to enter drains or surface waters.
- 6.3 **Methods for Cleaning up:** Observe all personal protective equipment recommendations described in this MSDS. If diked material can be pumped, store recovered material in appropriate container. Wipe up or scrape up and contain for salvage or disposal. Clean area as appropriate since

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spilled materials, even in small quantities, may present a slip hazard. Final cleaning may require use of steam, solvents or detergents. Dispose of saturated absorbant or cleaning materials appropriately, since spontaneous heating may occur. Laws and regulations may apply to releases 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.

7. HANDLING AND STORAGE

- 7.1 Handling Precautions:** Use with adequate ventilation. Avoid eye contact. Do not take internally. Exercise good industrial hygiene practice. Wash after handling, especially before eating, drinking or smoking.
- 7.2 Storage Conditions:** Use reasonable care and store away from oxidizing materials.
- 7.3 Unsuitable Packaging Materials:** None established.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Industrial Hygiene Standards:

<u>Ingredients</u>	<u>CAS No.</u>	<u>Exposure Limits</u>
Octamethylcyclotetrasiloxane	556-67-2	Dow Corning guide: TWA 10 ppm.

8.2 Engineering Controls

- Local Ventilation:** None should be needed.
- General Ventilation:** Recommended.

8.3 Personal Protective Equipment for Routine Handling

- Respiratory protection:** No respiratory protection should be needed.
- Suitable Respirator:** None should be needed.
- Eye protection:** Use proper protection - safety glasses as a minimum.
- Hand protection:** No special protection needed.
- Skin protection:** Washing at mealtime and end of shift is adequate.
- Hygiene Measures:** Exercise good industrial hygiene practice. Wash after handling, especially before eating, drinking or smoking.

8.4 Personal Protective Equipment for Spills

- Respiratory protection:** No respiratory protection should be needed.
- Eye protection:** Use proper protection - safety glasses as a minimum.
- Skin protection:** Washing at mealtime and end of shift is adequate.
- Precautionary Measures:** Avoid eye contact. Do not take internally. Use reasonable care.

Note: These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions.

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9. PHYSICAL AND CHEMICAL PROPERTIES

9.1	Physical Form:	Grease
9.2	Color:	Translucent white
9.3	Odor:	Odorless
9.4	pH:	Not determined.
9.5	Melting Point:	Not determined.
9.6	Boiling point/range:	Not determined.
9.7	Flash Point:	> 300 °C(Closed Cup)
9.8	Explosive Limit:	Not determined.
9.9	Vapor Pressure @ 25°C:	Not determined.
9.10	Vapour Density (air=1):	Not determined.
9.11	Specific Gravity:	1.1 g/cm ³
9.12	Water Solubility:	Not determined.
9.13	Partition Coefficient (n-Octanol/Water):	Not determined.
9.14	Autoignition temperature:	Not determined.
9.15	Decomposition Temperature :	Not determined.
9.16	Odor Threshold:	Not determined.
9.17	Evaporation Rate:	Not determined.
9.18	Flammability (Solid, Gas):	Not applicable.

The above information is not intended for use in preparing product specifications. Contact Dow Corning before writing specifications.

10. STABILITY AND REACTIVITY

10.1	Stability:	Stable.
10.2	Possibility of Hazardous Reactions:	Hazardous polymerization will not occur.
10.3	Conditions to Avoid:	None.
10.4	Materials to Avoid:	Can react with strong oxidising agents.
10.5	Hazardous Decomposition Products:	Silicon dioxide. Carbon oxides and traces of incompletely burned carbon compounds. Formaldehyde. Boron oxides.

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11. TOXICOLOGICAL INFORMATION

- 11.1 Route of Exposure:** Skin contact and accidental ingestion.
- 11.2 Signs and Symptoms of Overexposure:** No significant adverse effects from normal use.
- 11.3 Acute Toxicity:**
- | <u>Chemical Name</u> | <u>CAS No.</u> | <u>LD50 (Oral)</u> | <u>LD50 (Dermal)</u> | <u>LC50 (Inhalation)</u> |
|------------------------------|----------------|---------------------|----------------------|---------------------------|
| Octamethylcyclotetrasiloxane | 556-67-2 | > 4,800 mg/kg (Rat) | > 2.5 ML/KG (Rabbit) | 2975 PPM (Rat; 4hr vapor) |
- Eyes:** Direct contact may cause temporary redness and discomfort.
Skin: No significant irritation expected from a single short-term exposure.
Ingestion: Low ingestion hazard in normal use.
Inhalation: No significant effects expected from a single short-term exposure.
- 11.4 Chronic Toxicity**
- Skin:** No known applicable information.
Ingestion: Repeated ingestion or swallowing large amounts may injure internally.
Inhalation: No known applicable information.
- 11.5 Other Health Hazard Information:** No known applicable information.

The above listed potential effects of overexposure are based on actual data, the results of studies performed upon similar compositions, component data, and/or expert review of the products.

12. ECOLOGICAL INFORMATION

- 12.1 Aquatic and Terrestrial Ecotoxicity**
- Ecotoxicity Effects:**
- Acute:** No adverse effects on aquatic organisms are predicted.
Chronic: No adverse effects on aquatic organisms are predicted.
- Fate and Effects in Waste Water Treatment Plants:** No adverse effects on bacteria are predicted.
- 12.2 Persistence and Degradability**
- Water:** Solid material, insoluble in water.
- 12.3 Bioaccumulative Potential**
- Bioaccumulation:** No bioaccumulation potential.
- 12.4 Mobility in Soil:** This product is a solid and does not contain significant concentrations of water soluble constituents that may be leached from the product. It is therefore not likely to present a danger to terrestrial organisms.

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12.5 Additional Environmental Information: No specific information is available.

13. DISPOSAL CONSIDERATIONS

13.1 Product Disposal: Dispose of in accordance with local regulations.

13.2 Packaging Disposal: Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION**14.1 Road and Rail Transport**

Not applicable.

14.2 Sea Transport (IMDG)

Not subject to IMDG code.

14.3 Air Transport (IATA)

Not subject to IATA regulations.

14.4 Special Requirements and Additional Information : None.

15. REGULATORY INFORMATION

15.1 Applicable Laws: Provisions of the Regulations for the Safe Handling of Chemicals in the Workplace
General rule for classification and hazard communication of chemicals [GB 13690-2009]

15.2 Chemical Inventories

EINECS: All ingredients listed or exempt.
TSCA: All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.
AICS: All ingredients listed or exempt.
IECSC: All ingredients listed or exempt.
ENCS/ISHL: All components are listed on ENCS/ISHL or its exempt rule.
KECL: All ingredients listed, exempt or notified.
PICCS: All ingredients listed or exempt.
DSL: A chemical substance(s) in the material is not listed DSL but 1) meets the low volume exemption or 2) a New Substance Notification has been filed with Environment Canada.
Contact your local Dow Corning Office.
HSNO: All ingredients listed or exempt.

16. OTHER INFORMATION

DOW CORNING(R) HIGH VACUUM GREASE

16.1 Contact Point: Technical Information Center 400 880 7110

16.2 Prepared by: Dow Corning (China) Holding Company Limited

Legend:

- No specific information available

This information is offered in good faith as typical values and not as a product specification. No warranty, expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.

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