

MOLYKOTE(R) G PASTE

1. IDENTIFICATION OF THE PRODUCT AND OF THE COMPANY

1.1	Product Name:	MOLYKOTE(R) G PASTE
1.2	Manufacturer's Product Code:	02310031
1.3	Chemical Classification:	Molybdenum disulfide grease
1.4	Use:	Lubricant
1.5	Company Details	
	Manufacturer/Supplier:	Dow Corning India Private Limited
	Address:	Plot No 100 # A, MIDC, Ranjangaon, Shirur Taluk, Pune District # 412 220
	Telephone Number:	+91 (2138) - 662800
	Fax Number:	+91 (2138) - 662811
	Emergency Telephone Number:	+91 (2138) - 662856
	Contact Person:	Environment, Health and Safety Leader

2. COMPOSITION / INFORMATION ON INGREDIENTS

- 2.1 **Chemical characterization:**
2.2 **Hazardous Ingredients:**

<u>Chemical Name</u>	<u>CAS No.</u>	<u>% (w/w)</u>	<u>Symbols & Health Risk Phrases</u>
Zinc dialkyl dithiophosphate	84605-29-8	<1	Xi Irritant. N Dangerous for the environment. R36/38 Irritating to eyes and skin. R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

*Classified as hazardous according to the Hazardous Chemical List as defined in Schedule 1 of Manufacture, Storage and Import of Hazardous Chemical Rule, 1989 and European Commission Directive 1999/45/EC (Article 3 [3]).

3. HAZARDS IDENTIFICATION

- 3.1 **Overall Hazard Classification:** Not hazardous.
- 3.2 **Hazard Information:** Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- 3.3 **Precautionary Information:** Avoid contact with skin and eyes. In case of fire and/or explosion do not breathe fumes. Avoid release to the environment. Refer to special instructions/Safety data sheets.
- 3.4 **Signs and Symptoms of Overexposure:** No significant adverse effects from a single exposure expected from normal use.

4. FIRST AID MEASURES

- 4.1 **Eye:** Immediately flush with water for 15 minutes.
- 4.2 **Skin:** No first aid should be needed.
- 4.3 **Inhalation:** No first aid should be needed.

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- 4.4 **Ingestion:** Get medical attention.
 4.5 **Comments:** Treat according to person's condition and specifics of exposure.
 4.6 **Note to physicians:** Treat symptomatically. For further information, the medical practitioner should contact Dow Corning India Private Limited.

5. FIRE-FIGHTING MEASURES

- 5.1 **Hazardous Properties:** None.
 5.2 **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.
 5.3 **Special Fire Fighting Procedures and Equipment:** Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals. Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool.
 5.4 **Hazardous Combustion Products:** Metal oxides. Sulfur oxides. Carbon oxides and traces of incompletely burned carbon compounds. Formaldehyde.
 5.5 **Unsuitable Extinguishing Media:** None established.

6. ACCIDENTAL RELEASE MEASURES

- 6.1 **Personal Precautions:** Avoid skin and 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. 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 skin and 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>
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Zinc dialkyl dithiophosphate 84605-29-8 None established.

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:** Use proper protection - safety glasses as a minimum.**Hand:** No special protection needed.**Skin:** Washing at mealtime and end of shift is adequate.**Personal Hygiene:** 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.**Note:** These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions.**9. PHYSICAL AND CHEMICAL PROPERTIES**

- 9.1 **Physical Form:** Paste
- 9.2 **Color:** Charcoal
- 9.3 **Odor:** Odorless
- 9.4 **pH:** Not determined.
- 9.5 **Solubility in Water:** Not determined.
- 9.6 **Boiling Point:** Not determined.
- 9.7 **Melting Point:** Not determined.
- 9.8 **Flash Point:**
- 9.9 **Autoignition Temperature:** Not determined.
- 9.10 **Explosive properties:** No
- 9.11 **Oxidizing properties:** No
- 9.12 **Vapor Pressure @ 25°C:** Not determined.
- 9.13 **Specific Gravity:** 1.86
- 9.14 **Octanol/water partition coefficient:** Not determined.
- 9.15 **Vapour Density (air=1):** Not determined.
- 9.16 **Viscosity:** Not determined.
- 9.17 **Upper Flammability Limit:** Not determined.
- 9.18 **Lower Flammability Limit:** Not determined.

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.

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10.2 Reactivity	
Conditions to Avoid:	None.
Materials to Avoid:	Can react with strong oxidising agents.
Hazardous Decomposition Products:	Metal oxides. Sulfur oxides. Carbon oxides and traces of incompletely burned carbon compounds. Formaldehyde.
Hazardous Polymerization:	Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

11.1 Routes of Entry			
<input type="checkbox"/> Inhalation	<input checked="" type="checkbox"/> Skin Contact	<input checked="" type="checkbox"/> Ingestion	
11.2 Possible Health Effects			
Acute			
Skin:	No significant irritation expected from a single short-term exposure.		
Eye:	Direct contact may cause mild irritation.		
Inhalation:	Irritates respiratory passages very slightly.		
Ingestion:	Low ingestion hazard in normal use.		
Chronic			
Skin:	Repeated or prolonged contact may cause defatting and drying of skin which may result in skin irritation and dermatitis.		
Inhalation:	No known applicable information.		
Ingestion:	Repeated ingestion or swallowing large amounts may injure internally.		
11.3 Sensitizing Effects:	None known.		
11.4 Mutagenic Effects:	None known.		
11.5 Reproductive Effects:	None known.		
11.6 Carcinogenic Effects:	None known.		
11.7 Other Health Hazard Information:	Inhalation of fumes may result in metal fume fever, a flu-like illness with symptoms of metallic taste, fever and chills, aches, chest tightness, and cough.		

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 Environmental Fate and Distribution	
	Solid material, insoluble in water.
12.2 Ecotoxicity:	Harmful to aquatic organisms and may cause long-term adverse effects in the aquatic environment. However, due to the physical form and water-insolubility of the product the bioavailability is negligible.
Bioaccumulation:	No bioaccumulation potential. This product is a solid which is not soluble in water and if ingested will not be absorbed.

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12.3 Fate and Effects in Waste Water Treatment Plants: No adverse effects on bacteria are predicted.

13. DISPOSAL INFORMATION

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.

15. REGULATORY INFORMATION

15.1 NFPA Hazard Signals
Health 1 Flammability 1 Instability 0 Special -

15.2 Chemical Inventories
PICCS : All ingredients listed or exempt.
HSNO : All ingredients listed or exempt.
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.
DSL : Not determined.

16. OTHER INFORMATION

Contact Point: Environment, Health and Safety Leader
Prepared by: Dow Corning India Private Limited

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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