

MOLYKOTE(R) BR-2 PLUS GREASE

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product Details

Product Name: MOLYKOTE(R) BR-2 PLUS GREASE
Other Name: Molybdenum disulfide grease
Company Product Code: 01512854
Proper Shipping Name: Not applicable.
Recommended Use: Lubricant

1.2 Company Details

Manufacturer/Supplier: Dow Corning Australia Pty Ltd
Address: 3 Innovation Road, North Ryde, NSW 2113, Australia
Telephone Number: 1300-360-732
Emergency Telephone Number: 1300-360-732

2. HAZARD IDENTIFICATION

- 2.1 Hazard Classification:** Non-Hazardous Substance. Non-Dangerous Goods.
- 2.2 Risk Phrase(s):** Not hazardous.
- 2.3 Safety Phrase(s):** Avoid contact with skin and eyes.
Use only in well-ventilated areas.
Avoid release to the environment. Refer to special instructions/Safety data sheets.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Proportion %</u>
Zinc dialkyldithiophosphate	68649-42-3	<10

Ingredients determined not to be hazardous to 100%

4. FIRST AID MEASURES

4.1 First Aid Measures:

Ingestion: Get medical attention.
Eye: Immediately flush with water for 15 minutes.
Skin: No first aid should be needed.
Inhalation: No first aid should be needed.

4.2 Medical Attention and Special Treatment Needed:

First Aid Facilities: None should be required.
Comments: Treat according to person's condition and specifics of exposure.

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Note to physicians: Treat Symptomatically. For further information, the Medical Practitioner should contact Dow Corning Australia Pty Ltd.

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 Hazards From Combustion Products:** Carbon oxides and traces of incompletely burned carbon compounds. Metal oxides. Phosphorous oxides. Sulfur oxides. Fluorine compounds. Formaldehyde.
- 5.3 Precautions For Fire Fighters and Special Protective Equipment:** Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool. Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals.
- 5.4 Hazchem Code:** Not applicable.

6. ACCIDENTAL RELEASE MEASURES

- 6.1 Emergency Procedures:** Not applicable.
- 6.2 Methods and Materials for Containment and Clean Up Procedures:** 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 Precautions for Safe Handling:** 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 Conditions for Safe Storage:** Use reasonable care and store away from oxidizing materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1 Exposure Standards:****Ingredients**

Zinc dialkyldithiophosphate

Exposure LimitsNone established.
No biological limit allocated.

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

8.3 Personal Protective Equipment:

Respiratory: No respiratory protection should be needed.
Suitable Respirator: None should be needed.
Hand: No special protection needed.
Eye: Use proper protection - safety glasses as a minimum.
Skin: 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:** Grease
9.2 Colour: Black
9.3 Odour: Slight odor
9.4 pH: Not determined.
9.5 Vapour Pressure @ 25°C: Not determined.
9.6 Vapour Density (air=1): Not determined.
9.7 Boiling Point: Not determined.
9.8 Melting Point: Not determined.
9.9 Solubility in Water: Not determined.
9.10 Specific Gravity @ 25°C: 0.89
9.11 Flash Point:
9.12 Upper Flammability Limit: Not determined.
9.13 Lower Flammability Limit: Not determined.
9.14 Autoignition Temperature: Not determined.
9.15 Viscosity: 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 Chemical Stability:** Stable.
10.2 Conditions to avoid: None.
10.3 Incompatible Materials: Can react with strong oxidising agents.
10.4 Hazardous Decomposition Products: Carbon oxides and traces of incompletely burned carbon compounds. Metal oxides. Phosphorous oxides. Sulfur oxides. Fluorine compounds. Formaldehyde.

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10.5 Hazardous Reactions : Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

11.1 Possible Routes of Exposure Inhalation Skin Contact Ingestion

11.2 Possible Health Effects:

Acute

Ingestion: Low ingestion hazard in normal use.
Eye: Direct contact may cause mild irritation.
Skin: No significant irritation expected from a single short-term exposure.
Inhalation: Irritates respiratory passages very slightly.

Chronic

Ingestion: Repeated ingestion or swallowing large amounts may injure internally.
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.
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 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.

12.3 Fate and Effects in Waste Water Treatment Plants:

No adverse effects on bacteria are predicted.

13. DISPOSAL CONSIDERATIONS

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

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13.2 Special Precautions for Landfill or Incineration: None known.

14. TRANSPORT INFORMATION

14.1 UN No.: Not applicable.
14.2 Proper Shipping Name: Not applicable.
14.3 Class: Not applicable.
14.4 Packing Group: Not applicable.
14.5 Hazchem Code: Not applicable.
14.6 Sea transport (IMDG)
Not subject to IMDG code.
14.7 Air Transport (IATA-DGR)
Not subject to IATA regulations.

15. REGULATORY INFORMATION

15.1 SUSDP Poisons Schedule Number: None allocated.

15.2 Prohibition/Licensing Requirements: There are no applicable prohibition or notification/licensing requirements, including for carcinogens under Commonwealth, State or Territory legislation.

15.3 Industrial Chemicals (Notification and Assessment) Act 1989: All ingredients listed or exempt.

15.4 HSNO Approval Code: HSR002606

15.5 Chemical Inventories:

DSL: All chemical substances in this material are included on or exempted from the DSL.
IECSC: All ingredients listed or exempt.
EINECS: All ingredients listed or exempt.
MITI: All components are listed on ENCS or its exempt rule.
KECL: All ingredients listed, exempt or notified.
PICCS: 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.
HSNO: All ingredients listed or exempt.

16. OTHER INFORMATION

Contact Point: Product Safety Manager - 1300-360-732
Prepared by: Dow Corning Australia Pty Ltd

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This MSDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this Company. Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.

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