

MOLYKOTE(R) MKL-N GREASE

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product Details

Product Name: MOLYKOTE(R) MKL-N GREASE
Other Name: Mixture of inorganic and organic compounds
Company Product Code: 01206524
Proper Shipping Name: FLAMMABLE LIQUID, N.O.S. (Contains Butyl Acetate / Naphtha)
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. Dangerous Goods.
- 2.2 Risk Phrase(s):** Flammable.
- 2.3 Safety Phrase(s):** Do not breathe vapour.
 Avoid contact with skin and eyes.
 Take precautionary measures against static discharges.
 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>
Hydrotreated heavy petroleum naphtha	64742-48-9	10 - <30
Methoxypropanol acetate	108-65-6	10 - <30
Butyl acetate	123-86-4	10 - <30
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: Remove from skin and wash thoroughly with soap and water or waterless cleanser.
 Get medical attention if irritation or other ill effects develop or persist.

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Inhalation: Remove to fresh air. Get medical attention if ill effects persist.

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.

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 Unsuitable Extinguishing Media:** None established.
- 5.3 Hazards From Combustion Products:** Vapors are heavier than air and may travel to a source of ignition and flash back. Static electricity will accumulate and may ignite vapors. Prevent a possible fire hazard by bonding and grounding or inert gas purge.
- 5.4 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.
- 5.5 Hazchem Code:** 3(Y)E

6. ACCIDENTAL RELEASE MEASURES

- 6.1 Emergency Procedures:** HIGHLY FLAMMABLE: These products have a low flash point - will be easily ignited by heat, sparks or flames at ambient temperatures. ELIMINATE all ignition sources within at least 50 m - All equipment used in handling the product must be earthed. Do not touch or walk through spilled material. Stop leak if safe to do so - Prevent entry into waterways, drains or confined areas. Vapour-suppressing foam may be used to control vapours. Absorb spill with earth, sand or other non-combustible material - Use clean, non-sparking tools to collect material and place it in loosely-covered metal or plastic containers for later disposal. Water spray may be used to knock down or divert vapour clouds.
- 6.2 Methods and Materials for Containment and Clean Up Procedures:** Remove possible ignition sources. Determine whether to evacuate or isolate the area according to your local emergency plan. Observe all personal protective equipment recommendations described in this MSDS. If diked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absorbant. 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.

MOLYKOTE(R) MKL-N GREASE**7. HANDLING AND STORAGE**

- 7.1 Precautions for Safe Handling:** Use with adequate ventilation. Avoid skin and eye contact. Avoid breathing vapor, mist, dust, or fumes. Keep container closed. Do not take internally. Exercise good industrial hygiene practice. Wash after handling, especially before eating, drinking or smoking. If this product is heated to > 150 degrees C, trace quantities of formaldehyde may be released, and adequate ventilation is required.
- 7.2 Conditions for Safe Storage:** Static electricity will accumulate and may ignite vapors. Prevent a possible fire hazard by bonding and grounding or inert gas purge. Keep container closed and away from heat, sparks, and flame.

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

Hydrotreated heavy petroleum naphtha

Observe petroleum distillates limits. OSHA PEL (final rule): TWA 400 ppm. No biological limit allocated.

Methoxypropanol acetate

Australia: STEL 100 ppm (548 mg/m³). Can be absorbed through the skin. TWA 50 ppm (274 mg/m³).
AIHA WEEL: TWA 100 ppm.
No biological limit allocated.

Butyl acetate

Australia: TWA 150 ppm (713 mg/m³). STEL 200 ppm (950 mg/m³).
OSHA PEL (final rule): TWA 150 ppm, 710 mg/m³. ACGIH TLV: TWA 150 ppm, STEL 200 ppm.
No biological limit allocated.**8.2 Engineering Controls:****Local Ventilation:**

Recommended.

General Ventilation:

Recommended.

8.3 Personal Protective Equipment:**Respiratory:**

Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. IH personnel can assist in judging the adequacy of existing engineering controls.

Suitable Respirator:

Organic Vapor/Dust/Mist Type.

Hand:

Chemical protective gloves should be worn.

Eye:

Use chemical worker's goggles.

Skin:

Wash at mealtime and end of shift. Contaminated clothing and shoes should be removed as soon as practical and thoroughly cleaned before reuse. Chemical protective gloves are recommended.

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:	Liquid
9.2	Colour:	Black
9.3	Odour:	Ester-like 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:	> 100 °C
9.8	Melting Point:	Not determined.
9.9	Solubility in Water:	Not determined.
9.10	Specific Gravity @ 25°C:	0.87
9.11	Flash Point:	22.5 °C (Tag Closed Cup)
9.12	Upper Flammability Limit:	Not determined.
9.13	Lower Flammability Limit:	Not determined.
9.14	Autoignition Temperature:	Not determined.
9.15	Viscosity:	4000 mm ² /s

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. Formaldehyde. Phosphorous oxides. Metal oxides. Sulfur oxides.
10.5	Hazardous Reactions :	Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

11.1	Possible Routes of Exposure	[X] Inhalation	[X] Skin Contact	[X] Ingestion
11.2	Possible Health Effects:			
	<u>Acute</u>			
	Ingestion:	May cause irritation to the mouth, throat and stomach.		
	Eye:	Direct contact may cause moderate irritation.		
	Skin:	May cause mild irritation.		

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Inhalation: Vapor and/or mist may irritate nose and throat. Vapor overexposure may cause drowsiness.

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: Overexposure by inhalation may injure the following organ(s): Liver. Kidneys. Nervous system.
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:**

Organic solvents may evaporate into the atmosphere, where they degrade. The mineral oils in the product are biodegradable.

12.2 Ecotoxicity:

This product contains substances which may cause adverse effects in the aquatic environment.

Bioaccumulation: Low potential to bioaccumulate.

12.3 Fate and Effects in Waste Water Treatment Plants:

May cause adverse effects on bacteria. If used as intended this product is not expected to reach waste water treatment plants.

13. DISPOSAL CONSIDERATIONS

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

13.2 Special Precautions for Landfill or Incineration: None known.

14. TRANSPORT INFORMATION

14.1 UN No.: 1993
14.2 Proper Shipping Name: FLAMMABLE LIQUID, N.O.S. (Contains Butyl Acetate / Naphtha)
14.3 Class: 3
14.4 Packing Group: II
14.5 Hazchem Code: 3(Y)E
14.6 Sea transport (IMDG)
Class: 3
Proper Shipping Name: FLAMMABLE LIQUID, N.O.S.

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Technical Name:	Butyl Acetate / Naphtha
UN No.:	UN 1993
Packing Group:	II
Hazard Label(s):	flammable liquid
14.7 Air Transport (IATA-DGR)	
Class:	3
Proper Shipping Name:	Flammable liquid, n.o.s.
Technical Name:	Butyl Acetate
UN No.:	UN 1993
Packing Group:	II
Hazard Label(s):	Flammable Liquid

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:	Not determined.
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.
KECL:	One or more ingredients are not listed or exempt or identified.
HSNO:	All ingredients listed or exempt.
PICCS:	One or more ingredients are not listed or exempt.
TSCA:	Not determined.
ENCS/ISHL:	Not determined.

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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