

(11076)



# DOW CORNING CORPORATION Material Safety Data Sheet

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Version: 2.0  
Revision Date: 2013/10/30

## MOLYKOTE(R) DX PASTE

### 1. PRODUCT AND COMPANY IDENTIFICATION

MSDS No.: 01160303

**SUPPLIER:**  
Dow Corning Corporation  
South Saginaw Road  
Midland, Michigan 48686

Prepared by Product Safety: (800) 248-2481  
NEWALTA: (800) 567-7455  
Revision Date: 2013/10/30

**MANUFACTURER:**  
Dow Corning Corporation  
South Saginaw Road  
Midland, Michigan 48686

24 Hour Emergency Telephone: (989) 496-5900

**APPROVED MATERIAL**  
  
APR 22 2014  
MSDS # 11076  
APPROVED BY *[Signature]*

**WHMIS CLASSIFICATION:** Class D, Division 2, Subdivision A.  
Class D, Division 2, Subdivision B.

Material Usage: Lubricant

### 2. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

**Generic Description:** Mixture of inorganic and organic compounds  
**Physical Form:** Paste  
**Colour:** White  
**Odour:** Slight

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#### POTENTIAL HEALTH EFFECTS

##### Acute Effects

**Eye:** Direct contact may cause severe irritation.

**Skin:** May cause moderate irritation.

**Inhalation:** Material is not likely to present an inhalation hazard at ambient conditions. However, if material is heated or high vapor concentration is attained, central nervous system depression may occur, which is characterized by drowsiness, dizziness, confusion or loss of coordination.

**Oral:** Low ingestion hazard in normal use.

##### Prolonged/Repeated Exposure Effects

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**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.

**Oral:** Repeated ingestion or swallowing large amounts may injure internally.

#### Other Health Effects

This product contains a chemical(s) that has the following effect(s):  
Carcinogenicity

See Section 11 for specific details.

#### Signs and Symptoms of Overexposure

No known applicable information.

#### Medical Conditions Aggravated by Exposure

No known applicable information.

The above listed potential effects of overexposure are based on actual data, results of studies performed upon similar compositions, component data and/or expert review of the product. Please refer to Section 11 for the detailed toxicology information.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>
64742-52-5	15.0 - 40.0	Hydrotreated heavy naphthenic petroleum distillate
61791-53-5	1.0 - 5.0	N-Tallow Alkyltrimethylenediamine Oleate
9002-84-0	1.0 - 5.0	Polytetrafluoroethylene
1314-13-2	1.0 - 5.0	Zinc oxide

The ingredients listed above are controlled products as defined in CPR, am. SOR/88-555.

### 4. FIRST AID MEASURES

**Eye:** Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 15 - 20 minutes while holding the eyelid(s) open. If contact lens is present, DO NOT delay irrigation or attempt to remove the lens. Take care not to rinse contaminated water into the unaffected eye or onto the face. Immediately obtain medical attention.

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Skin:	Remove contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Quickly and gently blot or brush away excess chemical. Flush with lukewarm gently flowing water for 15 minutes. If irritation persists, repeat flushing. If irritation persists, obtain medical advice.
Inhalation:	If symptoms are experienced remove source of contamination or move victim to fresh air. If irritation persists, obtain medical advice.
Oral:	If irritation or discomfort occur, obtain medical advice.
Notes to Physician:	Treat according to person's condition and specifics of exposure.

**5. FIRE-FIGHTING MEASURES**

Flash Point:	> 392 °F / > 200 °C (Closed Cup)
Autoignition Temperature:	Not available.
Flammability Limits in Air:	Not available.
Extinguishing Media:	On large fires use dry chemical, foam or water spray. On small fires use carbon dioxide (CO <sub>2</sub> ), dry chemical or water spray. Water can be used to cool fire exposed containers.
Fire Fighting Measures:	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.
Unusual Fire Hazards:	None.

**6. ACCIDENTAL RELEASE MEASURES**

Containment/Clean up:	Observe all personal protection equipment recommendations described in Sections 5 and 8. Wipe up or scrape up and contain for salvage or disposal. Clean area as appropriate since 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. Local, provincial, federal 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.
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Note: See Section 8 for Personal Protective Equipment for Spills. Refer to Section 1 to obtain telephone numbers, if additional information is required.

**7. HANDLING AND STORAGE**

Use with adequate ventilation. At temperatures above 482F/250C this material may produce highly toxic gaseous compounds such as hydrogen fluoride and perfluorohydrocarbons. Provide adequate ventilation or use the appropriate respiratory protection if the possibility of exceeding 482F/250C exists. Avoid contamination of tobacco products.

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Fluoropolymers on tobacco goods may cause adverse health effects by inhalation of the decomposition products. Employees should wash their hands and face before eating, drinking or using tobacco products. Avoid eye contact. Avoid skin contact. Avoid breathing vapor. Keep container closed. Do not take internally.

Use reasonable care and store away from oxidizing materials. This material in its finely divided form presents an explosion hazard. Follow NFPA 654 (for chemical dusts) or 484 (for metal dusts) as appropriate for managing dust hazards to minimize secondary explosion potential.

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

##### Component Exposure Limits

Consult local authorities for acceptable provincial values.

<u>CAS Number</u>	<u>Component Name</u>	<u>Exposure Limits</u>
64742-52-5	Hydrotreated heavy naphthenic petroleum distillate	Observe petroleum distillates limits. OSHA PEL (final rule): TWA 400 ppm. LC50: > 4 mg/l - Inhalation Rat ; 4hr dust/mist LD50: > 5,000 mg/kg - Oral Rat LD50: > 2,000 mg/kg - Dermal Rabbit
61791-53-5	N-Tallow Alkyltrimethylenediamine Oleate	LD50: > 5,000 mg/kg - Oral Rat
1314-13-2	Zinc oxide	OSHA PEL (final rule) (fume): TWA 5 mg/m <sup>3</sup> , STEL 10 mg/m <sup>3</sup> . OSHA PEL (final rule) (dust): TWA 10 mg/m <sup>3</sup> total dust, 5 mg/m <sup>3</sup> respirable fraction. ACGIH TLV: TWA 2 mg/m <sup>3</sup> respirable fraction, STEL 10 mg/m <sup>3</sup> respirable fraction. LD50: > 5,000 mg/kg - Oral Rat

##### Engineering Controls

Local Ventilation: Recommended.  
General Ventilation: Recommended.

##### Personal Protective Equipment for Routine Handling

Eyes: 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.

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Suitable Gloves:	Avoid skin contact by implementing good industrial hygiene practices and procedures. Select and use gloves and/or protective clothing to further minimize the potential for skin contact. Consult with your glove and/or personnel protective equipment manufacturer for selection of appropriate compatible materials.
Inhalation:	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:	Respiratory protection is not needed under ambient conditions. If vapor is generated when material is heated or handled, the following is advised. General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits as determined by air sampling or are unknown, appropriate respiratory protection should be worn. Follow CSA Standard Z94.4-93 and use NIOSH/MHSA approved respirators.

**Personal Protective Equipment for Spills**

Eyes:	Use full face respirator.
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.
Inhalation/Suitable Respirator:	Respiratory protection recommended. Follow CSA Standard Z94.4-93 and use NIOSH/MHSA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.
Precautionary Measures:	Avoid eye contact. Avoid skin contact. Avoid breathing vapor. Keep container closed. Do not take internally. Use reasonable care.
Comments:	At temperatures above 482F/250C this material may produce highly toxic gaseous compounds such as hydrogen fluoride and perfluorohydrocarbons. Provide adequate ventilation or use the appropriate respiratory protection if the possibility of exceeding 482F/250C exists. Avoid contamination of tobacco products. Fluoropolymers on tobacco goods may cause adverse health effects by inhalation of the decomposition products. Employees should wash their hands and face before eating, drinking or using tobacco products.

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**Physical Form: Paste  
Color: White  
Odor: Slight

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Odor Threshold: Not available.  
Specific Gravity @ 25°C: 1.14  
Viscosity: Not available.  
Freezing/Melting Point: Not available.  
Boiling Point: Not available.  
Vapor Pressure @ 25°C: Not available.  
Vapor Density: Not available.  
Evaporation Rate: Not available.  
Solubility in Water: Not available.  
Coefficient of Water/Oil: Not available.  
Distribution:  
pH: Not available.  
Volatile Content: Not available.

Flash Point: > 392 °F / > 200 °C (Closed Cup)  
Autoignition Temperature: Not available.  
Flammability Limits in Air: Not available.

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

**10. STABILITY AND REACTIVITY**

Chemical Stability: Stable.  
Hazardous Polymerization: Hazardous polymerization will not occur.  
Conditions to Avoid: None.  
Materials to Avoid: Oxidizing material can cause a reaction.

**Hazardous Decomposition Products**

Thermal breakdown of this product during fire or very high heat conditions may evolve the following decomposition products: Carbon oxides and traces of incompletely burned carbon compounds. Phosphorous oxides. Metal oxides. Nitrogen oxides. Fluorine compounds. Zinc oxide fumes. Formaldehyde.

**11. TOXICOLOGICAL INFORMATION****Component Toxicology Information**

Inhalation of fumes from fire decomposition of polytetrafluoroethylene (Teflon) is known to cause polymer fume fever.

**Special Hazard Information on Components****Carcinogens**

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<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>	
64742-52-5	15.0 - 40.0	Hydrotreated heavy naphthenic petroleum distillate	IARC Group 1 - Carcinogenic to Humans.

**12. ECOLOGICAL INFORMATION**

**Environmental Fate and Distribution**

Complete information is not yet available.

**Environmental Effects**

Complete information is not yet available.

**Fate and Effects in Waste Water Treatment Plants**

Complete information is not yet available.

**Ecotoxicity Classification Criteria**

Hazard Parameters (LC50 or EC50)	High	Medium	Low
Acute Aquatic Toxicity (mg/L)	<=1	>1 and <=100	>100
Acute Terrestrial Toxicity	<=100	>100 and <= 2000	>2000

This table is adapted from "Environmental Toxicology and Risk Assessment", ASTM STP 1179, p.34, 1993.

This table can be used to classify the ecotoxicity of this product when ecotoxicity data is listed above. Please read the other information presented in the section concerning the overall ecological safety of this material.

**13. DISPOSAL CONSIDERATIONS**

Can be incinerated in accordance with local regulations.

Call local hazardous waste disposal company or provincial waste authorities for more information. Refer to Section 1 to obtain telephone numbers, if additional information is required.

**14. TRANSPORT INFORMATION**

**Canada Road (Based on IMDG Regulations)**

Not subject to local road regulations.

**Ocean Shipment (IMDG)**

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

Hazard Technical Name: Tallowalkyltriethylene diamineoleate / Zinc Oxide

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Hazard Class: 9  
UN/NA Number: UN 3077  
Packing Group: III  
Hazard Label(s): Miscellaneous dangerous substances and articles  
Marine Pollutant: Tallowalkyltriethylene diamineoleate  
Zinc Oxide

**Air Shipment (IATA)**

Proper Shipping Name: Environmentally hazardous substance, solid, n.o.s.  
Hazard Technical Name: Tallowalkyltriethylene diamineoleate / Zinc Oxide  
Hazard Class: 9  
UN/NA Number: UN 3077  
Packing Group: III  
Hazard Label(s): Miscellaneous dangerous goods  
Apply Gross Wt Supplemental Label to Outer Package if shipping Limited Quantity

Refer to Section 1 to obtain telephone numbers, if additional information is required.

**15. REGULATORY INFORMATION**

This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

WHMIS CLASSIFICATION: Class D, Division 2, Subdivision A.  
Class D, Division 2, Subdivision B.

DSL Status: All chemical substances in this material are included on or exempted from the DSL.

TSCA Status: All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.



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**MOLYKOTE(R) DX PASTE****16. OTHER INFORMATION**

Prepared by: Dow Corning Corporation

These data are offered in good faith as typical values and not as product specifications. No warranty, either 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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