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# **MOLYKOTE(R) YM-103 GREASE**

## 1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

Dow Corning Corporation 24 Hour Emergency Telephone: (989) 496-5900 South Saginaw Road Customer Service: (989) 496-6000

Midland, Michigan 48686 Product Disposal Information: (989) 496-6315

CHEMTREC: (800) 424-9300

MSDS No.: 02024144 Revision Date: 2007/06/04

Generic Description: Organic grease

Physical Form: Grease
Color: Yellow
Odor: Some odor

NFPA Profile: Health 2 Flammability 1 Instability/Reactivity 0

Note: NFPA = National Fire Protection Association

#### 2. HAZARDS IDENTIFICATION

## POTENTIAL HEALTH EFFECTS

**Acute Effects** 

Eye: Direct contact may cause temporary redness and discomfort.

Skin: No significant irritation expected from a single short-term exposure.

Inhalation: No significant effects expected from a single short-term exposure.

Oral: Low ingestion hazard in normal use.

Prolonged/Repeated Exposure Effects

Skin: Repeated or prolonged exposure may cause irritation.

Inhalation: No known applicable information.

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

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,



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component data and/or expert review of the product. Please refer to Section 11 for the detailed toxicology information.

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS Number Wt % Component Name

68412-26-0 3.0 - 7.0 Molybdenum oxide sulfide dibutyldithiocarbamate

The above components are hazardous as defined in 29 CFR 1910.1200.

#### 4. FIRST AID MEASURES

Eye: Immediately flush with water.

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.

Inhalation: No first aid should be needed.

Oral: Get medical attention.

Notes to Physician: Treat according to person's condition and specifics of exposure.

#### 5. FIRE FIGHTING MEASURES

Flash Point: Not applicable.

Autoignition Temperature: Not determined.

Flammability Limits in Air: Not determined.

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.

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



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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, state and 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. You will need to determine which federal, state and local laws and regulations are applicable. Sections 13 and 15 of this MSDS provide

information regarding certain federal and state requirements.

Note: See section 8 for Personal Protective Equipment for Spills. Call (989) 496-5900, 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. 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. Do not take internally.

Use reasonable care and store away from oxidizing materials.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### **Component Exposure Limits**

Component Name CAS Number **Exposure Limits** 

68412-26-0 Molybdenum oxide sulfide OSHA PEL, as molybdenum: TWA 15 mg/m3 total dust, 5 dibutyldithiocarbamate

mg/m3 respirable fraction. ACGIH TLV, as molybdenum:

TWA 10 mg/m3.

#### **Engineering Controls**

Local Ventilation: None should be needed.

General Ventilation: Recommended.

## Personal Protective Equipment for Routine Handling

Use proper protection - safety glasses as a minimum. Eyes:

Skin: Washing at mealtime and end of shift is adequate.



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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: No respiratory protection should be needed.

Suitable Respirator: None should be needed.

Personal Protective Equipment for Spills

Eyes: Use proper protection - safety glasses as a minimum.

Skin: Washing at mealtime and end of shift is adequate.

Inhalation/Suitable

Respirator:

No respiratory protection should be needed.

Precautionary Measures: Avoid eye contact. Avoid skin contact. 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: Grease

Color: Yellow

Odor: Some odor

Specific Gravity @ 25°C: 0.90

Viscosity: Not determined.

Freezing/Melting Point: Not determined.

Boiling Point: Not determined.

Vapor Pressure @ 25°C: Not determined.
Vapor Density: Not determined.

Solubility in Water: Not determined.

pH: Not determined.

Volatile Content: Not determined.

Flash Point: Not applicable.

Autoignition Temperature: Not determined. Flammability Limits in Air: Not determined.



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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 will not occur.

Polymerization:

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. Metal oxides. Nitrogen oxides. Fluorine compounds. Sulfur oxides. 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**

No known applicable information.

#### 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** 



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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

#### RCRA Hazard Class (40 CFR 261)

When a decision is made to discard this material, as received, is it classified as a hazardous waste? No

State or local laws may impose additional regulatory requirements regarding disposal. Call (989) 496-6315, if additional information is required.

#### 14. TRANSPORT INFORMATION

#### **DOT Road Shipment Information (49 CFR 172.101)**

Not subject to DOT.

#### Ocean Shipment (IMDG)

Not subject to IMDG code.

## **Air Shipment (IATA)**

Not subject to IATA regulations.

Call Dow Corning Transportation, (989) 496-8577, if additional information is required.

#### 15. REGULATORY INFORMATION

Contents of this MSDS comply with the OSHA Hazard Communication Standard 29 CFR 1910.1200.

TSCA Status: All chemical substances in this material are included on or exempted from listing on the TSCA

Inventory of Chemical Substances.

#### **EPA SARA Title III Chemical Listings**

Section 302 Extremely Hazardous Substances (40 CFR 355):

None

Section 304 CERCLA Hazardous Substances (40 CFR 302):

None.



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## Section 311/312 Hazard Class (40 CFR 370):

Acute: No Chronic: No Fire: No Pressure: No Reactive: No

## Section 313 Toxic Chemicals (40 CFR 372):

None present or none present in regulated quantities.

Note: Chemicals are listed under the 313 Toxic Chemicals section only if they meet or exceed a reporting threshold.

## **Supplemental State Compliance Information**

#### California

Warning: This product contains the following chemical(s) listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as being known to cause cancer, birth defects or other reproductive harm.

None known.

#### Massachusetts

CAS Number	<u>Wt %</u>	Component Name
7620-77-1	5.0 - 10.0	12-Hydroxy lithium stearate
4499-91-6	1.0 - 5.0	Docosanoic acid, lithium salt

#### **New Jersey**

<u>Wt %</u>	Component Name
> 60.0	1-Dodecene, polymer with 1-decene, hydrogenated
5.0 - 10.0	12-Hydroxy lithium stearate
5.0 - 10.0	Melamine cyanurate
5.0 - 10.0	Polybutene
3.0 - 7.0	Polytetrafluoroethylene
1.0 - 5.0	Docosanoic acid, lithium salt
	> 60.0 5.0 - 10.0 5.0 - 10.0 5.0 - 10.0 3.0 - 7.0



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Pennsylvania		
CAS Number	<u>Wt %</u>	Component Name
151006-60-9	> 60.0	1-Dodecene, polymer with 1-decene, hydrogenated
7620-77-1	5.0 - 10.0	12-Hydroxy lithium stearate
37640-57-6	5.0 - 10.0	Melamine cyanurate
9003-29-6	5.0 - 10.0	Polybutene
9002-84-0	3.0 - 7.0	Polytetrafluoroethylene
68412-26-0	3.0 - 7.0	Molybdenum oxide sulfide dibutyldithiocarbamate
4499-91-6	1.0 - 5.0	Docosanoic acid, lithium salt
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## **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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