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Version: 1.8 Revision Date: 2009/08/23

MOLYKOTE(R) 3400A ANTI-FRICTION COATING LEADFREE

1. PRODUCT AND COMPANY IDENTIFICATION

Dow Corning Corporation South Saginaw Road Midland, Michigan 48686 24 Hour Emergency Telephone: (989) 496-5900

Customer Service: (989) 496-6000 Product Disposal Information: (989) 496-6315

CHEMTREC: (800) 424-9300

MSDS No : 04044115

Revision Date: 2009/08/23

Generic Description: Inorganic and organic compounds dispersion

Physical Form: Liquid
Color: Charcoal
Odor: Solvent odor.

NFPA Profile: Health 2 Flammability 3 Instability/Reactivity 0

Note: NFPA = National Fire Protection Association

2. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

Acute Effects

Eye:

Direct contact may cause severe irritation. Vapor may cause eye irritation.

Skin:

May cause moderate irritation.

Inhalation:

Vapor may irritate nose and throat. Vapor overexposure may cause drowsiness.

Oral:

May cause irritation to the mouth, throat and stomach. Aspiration of liquid while vomiting may

injure lungs seriously.

Prolonged/Repeated Exposure Effects

Skin:

Repeated skin contact may cause allergic skin reaction.

Inhalation:

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

Lungs. Kidneys.

Oral:

Overexposure by ingestion may injure the following organ(s): Heart. Lungs. Liver. Kidneys.

Signs and Symptoms of Overexposure

No known applicable information.

Medical Conditions Aggravated by Exposure

No known applicable information.



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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

4. FIRST AID MEASURES

Eye: Immediately flush with water for 15 minutes. Get medical attention.

Skin: Remove from skin and immediately flush with water for 15 minutes. Get medical attention if

irritation or ill effects develop or persist.

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

Oral: Get immediate medical attention. Only induce vomiting at the instructions of a physician.

Never give anything by mouth to an unconscious person.

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

5. FIRE FIGHTING MEASURES

Flash Point: 50 °F / 10 °C (Closed Cup)

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: 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.

6. ACCIDENTAL RELEASE MEASURES



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Containment/Clean up:

Remove possible ignition sources. Determine whether to evacuate or isolate the area according to your local emergency plan. Observe all personal protection equipment recommendations described in Sections 5 and 8. For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absorbant. 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. Avoid eye exposure. Avoid skin contact. Avoid breathing vapor, mist, dust, or fumes. Keep container closed. Do not take internally.

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

Component Exposure Limits

Engineering Controls

Local Ventilation: General Ventilation: Recommended. Recommended.

Personal Protective Equipment for Routine Handling

Eves:

Use chemical worker's goggles.

Skin:

Wash at mealtime and end of shift. If skin contact occurs, change contaminated clothing as soon as possible and thoroughly flush affected areas with cool water. 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: Self-contained breathing apparatus (SCBA) or other supplied-air respirator.

Personal Protective Equipment for Spills

Eyes: Use full face respirator.

Skin: Wash at mealtime and end of shift. If skin contact occurs, change contaminated clothing as

soon as possible and thoroughly flush affected areas with cool water. Chemical protective

gloves are recommended.

Inhalation/Suitable

Respirator:

Use self-contained breathing apparatus (SCBA) or other supplied-air respirator.

Precautionary Measures: Avoid eye exposure. Avoid skin contact. Avoid breathing vapor, mist, dust, or fumes. Keep

container closed. Do not take internally. Use reasonable care.

Note: These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions. For further information regarding aerosol inhalation toxicity, please refer to the guidance document regarding the use of silicone-based materials in aerosol applications that has been developed by the silicone industry (www.SEHSC.com) or contact the Dow Coming customer service group.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: Liquid

Color: Charcoal
Odor: Solvent odor.

Specific Gravity @ 25°C: 1.2

Viscosity: 30 s

Freezing/Melting Point: Not determined.

Boiling Point: > 35 °C

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

Solubility in Water: Not determined.

PH: Not determined.

PH: Not determined.

Volatile Content: Not determined.

Flash Point: 50 °F / 10 °C (Closed Cup)

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

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



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specifications.

10. STABILITY AND REACTIVITY

Chemical Stability:

Stable.

Hazardous

Hazardous polymerization will not occur.

Polymerization:

Conditions to Avoid:

None.

Materials to Avoid:

Oxidizing material can cause a reaction.

<u>Hazardous Decomposition Products</u>

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. Silicon dioxide. Metal oxides. Formaldehyde. Nitrogen oxides. Fluorine compounds. Chlorine compounds. Sulfur oxides.

11. TOXICOLOGICAL INFORMATION

Component Toxicology Information

Prolonged overexposure to Ethanol has caused human birth defects.

When heated to temperatures above 150 degrees C in the presence of air, product can form formaldehyde vapors. Formaldehyde is a potential cancer hazard, a known skin and respiratory sensitizer, and an irritant to the eyes, nose, throat, skin, and digestive system. Safe handling conditions may be maintained by keeping vapor concentrations within the OSHA Permissible Exposure Limit for formaldehyde.

Special Hazard Information on Components

Developmental Toxicity

CAS Number

Wt %

Component Name

64-17-5

10.0 - 30.0

Ethyl alcohol

Evidence of teratogenicity (birth defects) in humans.

12. ECOLOGICAL INFORMATION

Environmental Fate and Distribution

Complete information is not yet available.



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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)

Acute Aquatic Toxicity (mg/L)

Acute Terrestrial Toxicity

High

High

Nedium

>1 and <=100

>100

>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? Yes

Characteristic Waste:

Ignitable:

D001

TCLP:

D004

D035

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)

Proper Shipping Name:

Flammable liquids, n.o.s.

Hazard Technical Name:

Butyl Acetate / Methyl ethyl ketone

Hazard Class:

3

UN/NA Number:

UN 1993

Packing Group:

Ш

Hazard Label(s):

Flammable Liquid

Ocean Shipment (IMDG)



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Proper Shipping Name:

FLAMMABLE LIQUID, N.O.S.

Hazard Technical Name:

Butyl Acetate / Methyl ethyl ketone

Hazard Class:

3

UN/NA Number:

UN 1993

Packing Group:

П

Hazard Label(s):

flammable liquid

Air Shipment (IATA)

Proper Shipping Name:

Flammable liquid, n.o.s.

Hazard Technical Name:

Butyl Acetate / Methyl ethyl ketone

Hazard Class:

3

UN/NA Number:

UN 1993

Packing Group:

п

Hazard Label(s);

Flammable Liquid

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):

CAS Number

Wt %

Component Name

50-00-0

<=0.1

Formaldehyde

Section 304 CERCLA Hazardous Substances (40 CFR 302):

CAS Number

<u>Wt %</u>

Component Name

123-86-4

29.0

Butyl acetate



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78-93-3	16.0	Methyl ethyl ketone
1309-64-4	13.0	Antimony trioxide
141-78-6	0.8	Ethyl acetate
67-56-1	0.6	Methyl alcohol
50-00-0	<=0.1	Formaldehyde

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

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

Section 313 Toxic Chemicals (40 CFR 372):

occitor or rocke Chemicals (40 Cris 5/2).				
<u>CAS Number</u>	<u>Wt %</u>	Component Name		
78-93-3	16.0	Methyl ethyl ketone		
1309-64-4	13.0	Antimony trioxide		
68409-81-4	<=0.2	Fatty acids, C6-19-branched, cobalt(2+) salts		
61789-51-3	<=0.2	Cobalt naphthenate		
50-00-0	<=0.1	Formaldehyde		

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

<u>Supplemental State Compliance Information</u>

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.

CAS Number	Wt %	Component Name	
1309-64-4	10.0 - 30.0	Antimony trioxide	Carcinogenic.
68409-81-4	<=0.2	Fatty acids, C6-19-branched, cobalt(2+) salts	Carcinogenic.



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61789-51-3	<=0.2	Cobalt naphthenate	Carcinogenic.
108-88-3	<1.0	Toluene	Developmental toxin.
50-00-0	<=0.1	Formaldehyde	Carcinogenic.
Massachusetts			
CAS Number	<u>Wt %</u>	Component Name	
123-86-4	15.0 - 40.0	Butyl acetate	
78-93-3	15.0 - 40.0	Methyl ethyl ketone	
64-17-5	10.0 - 30.0	Ethyl alcohol	
1309-64-4	10.0 - 30.0	Antimony trioxide	
1317-33-5	10.0 - 30.0	Molybdenum disulfide	
50-00-0	<=0.1	Formaldehyde	
New Jersey			
CAS Number	<u>Wt %</u>	Component Name	
123-86-4	15.0 - 40.0	Butyl acetate	
78-93-3	15.0 - 40.0	Methyl ethyl ketone	
64-17-5	10.0 - 30.0	Ethyl alcohol	
1309-64-4	10.0 - 30.0	Antimony trioxide	
1317-33-5	10.0 - 30.0	Molybdenum disulfide	
68409-81-4	<=0.2	Fatty acids, C6-19-branch	ed, cobalt(2+) salts
50-00-0	<=0.1	Formaldehyde	
Doministrants			
Pennsylvania			
CAS Number	<u>Wt %</u>	Component Name	
123-86-4	15.0 - 40.0	Butyl acetate	
<u> </u>			



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78-93-3	15.0 - 40.0	Methyl ethyl ketone
64-17-5	10.0 - 30.0	Ethyl alcohol
1309-64-4	10.0 - 30.0	Antimony trioxide
1317-33-5	10.0 - 30.0	Molybdenum disulfide
25068-38-6	7.0 - 13.0	Bisphenol A-epichlorohydrin copolymer
28470-78-2	3.0 - 7.0	Formaldehyde polymer with allyl chloride and phenol
50-00-0	<=0.1	Formaldehyde

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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