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## MOLYKOTE(R) METAL PROTECTIVE COATING AEROSOL

#### 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

Product Disposal Information: (989) 496-6315 CHEMTREC: (800) 424-9300

MSDS No.: 02060612 Revision Date: 2009/02/19

Generic Description: Hydrocarbon aerosol propellant

Physical Form: Aerosol Color: Straw

Odor: Solvent odor.

NFPA Profile: Health 2 Flammability 4 Instability/Reactivity 0

Note: NFPA = National Fire Protection Association

#### 2. HAZARDS IDENTIFICATION

#### POTENTIAL HEALTH EFFECTS

**Acute Effects** 

Eye: Direct contact may cause moderate irritation.

Skin: May cause moderate irritation.

Inhalation: Vapor may irritate nose and throat. Overexposure by inhalation may cause central nervous

system depression which may be characterized by drowsiness, dizziness, confusion, loss of

coordination, unconsciousness, and at very high concentrations even death.

Oral: Product is an aerosol, swallowing is not likely to occur.

Prolonged/Repeated Exposure Effects

Skin: Repeated or prolonged contact may cause defatting and drying of skin which may result in

skin irritation and dermatitis.

Inhalation: Exposures to high concentrations may cause cardiac sensitization. Overexposure by

inhalation may injure the following organ(s): Kidneys. Lungs.

Oral: No known applicable information.

Signs and Symptoms of Overexposure

No known applicable information.

Medical Conditions Aggravated by Exposure



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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

CAS Number	<u>Wt %</u>	Component Name
75-28-5	> 60.0	Isobutane
64742-49-0	15.0 - 40.0	Hydrotreated light petroleum naphtha
64742-82-1	7.0 - 13.0	Petroleum distillate
67-63-0	3.0 - 7.0	Isopropyl alcohol
68783-96-0	1.0 - 5.0	Calcium salts of petroleum sulfonate

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

#### 4. FIRST AID MEASURES

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

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: Remove to fresh air. Get immediate medical attention.

Oral: No first aid should be needed.

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

#### 5. FIRE FIGHTING MEASURES

Flash Point: 59 °F / 15 °C (Pensky-Martens 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.



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Fire Fighting Measures: Self-contained breathing apparatus and protective clothing should be worn in fighting large

fires involving chemicals. Use water spray to keep fire exposed containers cool. Determine

the need to evacuate or isolate the area according to your local emergency plan.

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

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. 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.

#### 7. HANDLING AND STORAGE

Use with adequate ventilation. Avoid eye contact. Avoid skin contact. Do not breathe vapor, mist, dust, or fumes. Keep container closed.

Contents under pressure. Do not store above 120F/49C or in direct sunlight. 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**

<u>CAS Number</u> <u>Component Name</u> <u>Exposure Limits</u>

75-28-5 Isobutane OSHA PEL (final rule): TWA 800 ppm, 1900 mg/m3.

ACGIH TLV: TWA 1000 ppm.

64742-82-1 Petroleum distillate Vendor guide: TWA 100 ppm.

67-63-0 Isopropyl alcohol OSHA PEL (final rule): TWA 400 ppm, 980 mg/m3.

ACGIH TLV: TWA 200 ppm, STEL 400 ppm.

#### **Engineering Controls**

Local Ventilation: Recommended.



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General Ventilation: Recommended.

Personal Protective Equipment for Routine Handling

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

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.

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: General and local exhaust ventilation is recommended to maintain vapor exposures below

recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29

CFR 1910.134) and use NIOSH/MSHA 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 OSHA Respirator Regulations (29 CFR 1910.134) 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. Do not breathe vapor, mist, dust, or fumes. Keep

container closed. Use reasonable care.

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: Aerosol

Color: Straw



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Odor: Solvent odor.

Specific Gravity @ 25°C: 0.81

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: 59 °F / 15 °C (Pensky-Martens 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 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. Sulfur oxides. Formaldehyde.

#### 11. TOXICOLOGICAL INFORMATION

#### **Special Hazard Information on Components**

No known applicable information.

#### 12. ECOLOGICAL INFORMATION

#### **Environmental Fate and Distribution**

Complete information is not yet available.

#### **Environmental Effects**



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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

#### 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

State or local laws may impose additional regulatory requirements regarding disposal.

#### 14. TRANSPORT INFORMATION

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

Proper Shipping Name: Consumer Commodity

Hazard Class: ORM

Hazard Label(s): ORM-D (Other Regulated Materials)

#### Ocean Shipment (IMDG)

Proper Shipping Name: AEROSOLS

Hazard Class: 2.1

UN/NA Number: UN 1950

#### **Air Shipment (IATA)**



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Proper Shipping Name: Aerosols, flammable

Hazard Class: 2.1

UN/NA Number: UN 1950

Hazard Label(s): Flammable Gas

Apply Gross Wt Supplemental Label to Outer Package if shipping Limited Quantity

#### 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.

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

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

Section 313 Toxic Chemicals (40 CFR 372):

CAS Number Wt % Component Name

67-63-0 3.9 Isopropyl alcohol

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



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reproductive ha	arm.	
None known		
Massachusetts		
CAS Number	<u>Wt %</u>	Component Name
75-28-5	> 60.0	Isobutane
67-63-0	3.0 - 7.0	Isopropyl alcohol
New Jersey		
CAS Number	<u>Wt %</u>	Component Name
75-28-5	> 60.0	Isobutane
64742-49-0	15.0 - 40.0	Hydrotreated light petroleum naphtha
None	7.0 - 13.0	Vendor confidential ingredient
64742-82-1	7.0 - 13.0	Petroleum distillate
67-63-0	3.0 - 7.0	Isopropyl alcohol
Pennsylvania		
CAS Number	<u>Wt %</u>	Component Name
75-28-5	> 60.0	Isobutane
64742-49-0	15.0 - 40.0	Hydrotreated light petroleum naphtha
None	7.0 - 13.0	Vendor confidential ingredient
64742-82-1	7.0 - 13.0	Petroleum distillate
67-63-0	3.0 - 7.0	Isopropyl alcohol



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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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