DOW CORNING

DOW CORNING CORPORATION
Material Safety Data Sheet

MOLYKOTE(R) 557 SILICONE DRY FILM LUBRICANT (AEROSOL)

1. PRODUCT AND COMPANY IDENTIFICATION

MSDS No.: 02412560

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

Prepared by Product Safety: (800) 248-2481
NEWALTA: (800) 567-7455
Revision Date: 2012/05/17

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

24 Hour Emergency Telephone: (989) 496-5900

WHMIS CLASSIFICATION: **Class A.**
Class B, Division 5.
Class D, Division 2, Subdivision B.

Material Usage: **Lubricant**

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Generic Description: **Hydrocarbon aerosol propellant**
Physical Form: **Aerosol**
Colour: **Colorless**
Odour: **Solvent**

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POTENTIAL HEALTH EFFECTS

Acute Effects

Eye: Direct contact may cause moderate irritation.

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

Inhalation: Vapor and/or mist irritating to the respiratory tract. Overexposure by inhalation may cause drowsiness, dizziness, confusion or loss of coordination.

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.

Oral: No known applicable information.

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

CAS Number	Wt %	Component Name
67-64-1	40.0 - 70.0	Acetone
64741-66-8	15.0 - 40.0	Naphtha, Petroleum, Light Alkylate
74-98-6	10.0 - 30.0	Propane
106-97-8	10.0 - 30.0	Butane
67-63-0	3.0 - 7.0	Isopropyl alcohol

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.

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.

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Inhalation:	Remove from the source of contamination or move to fresh air. If breathing is difficult, trained personnel should administer emergency oxygen. If breathing has stopped, trained personnel should immediately begin artificial respiration or if the heart has stopped, cardiopulmonary resuscitation. Immediately obtain medical attention.
Oral:	Ingestion is not an applicable route of exposure for gases. 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:	Not applicable.
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 (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. 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, 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.

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

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

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

Consult local authorities for acceptable provincial values.

CAS Number	Component Name	Exposure Limits
67-64-1	Acetone	OSHA PEL (final rule): TWA 1000 ppm; 2400 mg/m3. ACGIH TLV: TWA 500 ppm, STEL 750 ppm, A4. LC50: 50100 MG/M3 - Inhalation Rat ; Vapor 8 Hrs LD50: 5,800 mg/kg - Oral Rat LD50: > 15,700 mg/kg - Dermal Rabbit
64741-66-8	Naphtha, Petroleum, Light Alkylate	Vendor guide: TWA 400 ppm. LC50: > 5.04 mg/l - Inhalation Rat ; Vapor LD50: > 7,000 mg/kg - Oral Rat LD50: > 2,000 mg/kg - Dermal Rabbit
74-98-6	Propane	OSHA PEL (final rule): TWA 1000 ppm, 1800 mg/m3. ACGIH TLV: TWA 1000 ppm. LC50: 658 mg/l - Inhalation Rat ; 4hr vapor LC50: 364840.961 ppm - Inhalation Rat ; 4hr vapor
106-97-8	Butane	OSHA PEL (final rule): TWA 800 ppm, 1900 mg/m3. ACGIH TLV: TWA 1000 ppm. LC50: 658 mg/l - Inhalation Rat ; 4hr vapor LC50: 276794.040 ppm - Inhalation Rat ; 4hr vapor
67-63-0	Isopropyl alcohol	OSHA PEL (final rule): TWA 400 ppm, 980 mg/m3. ACGIH TLV: TWA 200 ppm, STEL 400 ppm. LC50: 72.6 mg/l - Inhalation Rat ; 4hr vapor LC50: 29537.634 ppm - Inhalation Rat ; 4hr vapor LD50: > 2,000 mg/kg - Oral Rat LD50: 12,870 mg/kg - Dermal Rat

Engineering Controls

Local Ventilation: Recommended.
General Ventilation: Recommended.

Personal Protective Equipment for Routine Handling

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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.
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 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. 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:	Colorless
Odor:	Solvent
Odor Threshold:	Not available.
Specific Gravity @ 25°C:	0.8
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 Distribution:	Not available.
pH:	Not available.
Volatile Content:	Not available.
Flash Point:	Not applicable.
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. Silicon dioxide. 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

Complete information is not yet available.

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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)

Proper Shipping Name: AEROSOLS

Hazard Class: 2.1

UN/NA Number: UN 1950

Hazard Label(s): flammable gas

Ocean Shipment (IMDG)

Proper Shipping Name: AEROSOLS

Hazard Class: 2.1

UN/NA Number: UN 1950

Air Shipment (IATA)

Proper Shipping Name: Aerosols, flammable

Hazard Class: 2.1

UN/NA Number: UN 1950

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Hazard Label(s):	Flammable Gas
	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 A. Class B, Division 5. 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.

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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