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MSDS

Common Name: MOLYKOTE 557 SILICONE DRY FILM LUBRICANT (AEROSOL)**Manufacturer:** DOW CORNING**MSDS Revision Date:** 3/22/2007**Grainger Item Number(s):** 6Y774**Manufacturer Model Number(s):**

MSDS Table of Contents

Click the desired link below to jump directly to that section in the MSDS.

- [1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY](#)
- [2. HAZARDS IDENTIFICATION](#)
- [3. COMPOSITION/INFORMATION ON INGREDIENTS](#)
- [4. FIRST AID MEASURES](#)
- [5. FIRE FIGHTING MEASURES](#)
- [6. ACCIDENTAL RELEASE MEASURES](#)
- [7. HANDLING AND STORAGE](#)
- [8. EXPOSURE CONTROLS / PERSONAL PROTECTION](#)
- [9. PHYSICAL AND CHEMICAL PROPERTIES](#)
- [10. STABILITY AND REACTIVITY](#)
- [11. TOXICOLOGICAL INFORMATION](#)
- [12. ECOLOGICAL INFORMATION](#)
- [13. DISPOSAL CONSIDERATIONS](#)
- [14. TRANSPORT INFORMATION](#)
- [15. REGULATORY INFORMATION](#)
- [16. OTHER INFORMATION](#)

DOW CORNING

DOW CORNING CORPORATION

MATERIAL SAFETY DATA SHEET

VERSION: 1.6

REVISION DATE: 2007/03/22

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

1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY



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.: 02412560

REVISION DATE: 2007/03/22

GENERIC DESCRIPTION: HYDROCARBON AEROSOL PROPELLANT

PHYSICAL FORM: AEROSOL

COLOR: COLORLESS

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: NO SIGNIFICANT IRRITATION EXPECTED FROM A SINGLE SHORT-TERM EXPOSURE.

INHALATION:

VAPOR AND/OR MIST MAY IRRITATE NOSE AND THROAT. VAPOR OVEREXPOSURE MAY CAUSE DROWSINESS.

ORAL: LOW INGESTION HAZARD IN NORMAL USE.

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. REPEATED EXPOSURES MAY CAUSE ALLERGIC RESPIRATORY REACTION.

OVEREXPOSURE BY INHALATION MAY INJURE THE FOLLOWING ORGAN(S):
LUNGS. KIDNEYS. NERVOUS SYSTEM.

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, 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
75-28-5	40.0 - 70.0	ISOBUTANE
64742-48-9	30.0 - 60.0	HYDROTREATED HEAVY PETROLEUM NAPHTHA
67-64-1	10.0 - 30.0	ACETONE
67-63-0	3.0 - 7.0	ISOPROPYL ALCOHOL

THE ABOVE COMPONENTS ARE HAZARDOUS AS DEFINED IN 29 CFR 1910.1200.

4. FIRST AID MEASURES



EYE: IMMEDIATELY FLUSH WITH WATER FOR 15 MINUTES.

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:

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: 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. 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.



6. ACCIDENTAL RELEASE MEASURES

CONTAINMENT/CLEAN UP:

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.

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 CONTACT. AVOID SKIN CONTACT. DO NOT BREATHE 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. CONTENTS UNDER PRESSURE. DO NOT STORE ABOVE 120F/49C OR IN DIRECT SUNLIGHT.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION



COMPONENT EXPOSURE LIMITS:

CAS NUMBER	COMPONENT NAME	EXPOSURE LIMITS
75-28-5	ISOBUTANE	OSHA PEL (FINAL RULE): TWA: 800 PPM, 1900 MG/M3. ACGIH TLV: TWA: 1000 PPM.
64742-48-9	HYDROTREATED HEAVY PETROLEUM NAPHTHA	OBSERVE PETROLEUM DISTILLATES LIMITS. OSHA PEL (FINAL RULE): TWA: 400 PPM.
67-64-1	ACETONE	OSHA PEL (FINAL RULE): TWA: 1000 PPM; 2400 MG/M3. ACGIH TLV: TWA: 500 PPM STEL: 750 PPM, A4.
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.

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: SILVER SHIELD(R). 4H(R).

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. 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.

9. PHYSICAL AND CHEMICAL PROPERTIES



PHYSICAL FORM: AEROSOL

COLOR: COLORLESS

ODOR: SOLVENT ODOR.

SPECIFIC GRAVITY @ 25 DEG. C: 0.8

VISCOSITY: NOT DETERMINED.

FREEZING/MELTING POINT: NOT DETERMINED.

BOILING POINT: NOT DETERMINED.

VAPOR PRESSURE @ 25 DEG. 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.

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:

SILICON DIOXIDE. CARBON OXIDES AND TRACES OF INCOMPLETELY BURNED CARBON COMPOUNDS. FORMALDEHYDE.

11. TOXICOLOGICAL INFORMATION



COMPONENT TOXICOLOGY INFORMATION:

COMPLETE INFORMATION IS NOT YET AVAILABLE.

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:

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. CALL (989) 496-6315, IF ADDITIONAL INFORMATION IS REQUIRED.

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):

PROPER SHIPPING NAME: AEROSOLS, FLAMMABLE

HAZARD CLASS: 2.1

UN/NA NUMBER: UN 1950

HAZARD CLASS: FLAMMABLE GAS

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):

CAS NUMBER	WT %	COMPONENT NAME
75-28-5	45.0	ISOBUTANE
67-64-1	10.0	ACETONE

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	3.0	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 REPRODUCTIVE HARM.

NONE KNOWN.

MASSACHUSETTS:

CAS NUMBER	WT %	COMPONENT NAME
75-28-5	40.0 - 70.0	ISOBUTANE
67-64-1	10.0 - 30.0	ACETONE
67-63-0	3.0 - 7.0	ISOPROPYL ALCOHOL

NEW JERSEY:

CAS NUMBER	WT %	COMPONENT NAME
75-28-5	40.0 - 70.0	ISOBUTANE
64742-48-9	30.0 - 60.0	HYDROTREATED HEAVY PETROLEUM NAPHTHA
67-64-1	10.0 - 30.0	ACETONE
18748-98-6	3.0 - 7.0	TRIMETHYLSTEARYLOXYSILANE
67-63-0	3.0 - 7.0	ISOPROPYL ALCOHOL
112-92-5	3.0 - 7.0	STEARYL ALCOHOL

PENNSYLVANIA:

CAS NUMBER	WT %	COMPONENT NAME
75-28-5	40.0 - 70.0	ISOBUTANE
64742-48-9	30.0 - 60.0	HYDROTREATED HEAVY PETROLEUM NAPHTHA
67-64-1	10.0 - 30.0	ACETONE
18748-98-6	3.0 - 7.0	TRIMETHYLSTEARYLOXYSILANE
67-63-0	3.0 - 7.0	ISOPROPYL ALCOHOL
112-92-5	3.0 - 7.0	STEARYL ALCOHOL

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.

(R) INDICATES REGISTERED TRADEMARK