DOW CORNING -- MOLYKOTE 3402C BONDED LUBRICANT

MATERIAL SAFETY DATA SHEET

NSN: 9150013027377

Manufacturer's CAGE: 71984 Part No. Indicator: B

Part Number/Trade Name: MOLYKOTE 3402C BONDED LUBRICANT

General Information

Company's Name: DOW CORNING CORP Company's Street: S SAGINAW RD Company's City: MIDLAND

Company's City: MIDLAND Company's State: MI Company's Country: US Company's Zip Code: 48686

Company's Emerg Ph #: 517-496-5900 Company's Info Ph #: 517-496-6000 Record No. For Safety Entry: 002 Tot Safety Entries This Stk#: 002

Status: SMJ

Date MSDS Prepared: 27JUL94 Safety Data Review Date: 15JAN98

Supply Item Manager: CX MSDS Serial Number: CDVTM

Ingredients/Identity Information

Proprietary: NO

Ingredient: ISOPROPYL ALCOHOL (SARA 313)

Ingredient Sequence Number: 01

Percent: 45

NIOSH (RTECS) Number: NT8050000

CAS Number: 67-63-0 OSHA PEL: 400 PPM

ACGIH TLV: 400 PPM; 500 STEL

Proprietary: NO

Ingredient: BUTYL ALCOHOL; (N-BUTYL ALCOHOL) (SARA 313) (CERCLA)

Ingredient Sequence Number: 02

Percent: 22

NIOSH (RTECS) Number: E01400000

CAS Number: 71-36-3 OSHA PEL: 100 PPM ACGIH TLV: 50 PPM, S, C

Proprietary: NO

Ingredient: ETHANOL, 2-ETHOXY-, ACETATE; (2-ETHOXYETHYL ACETATE)

Ingredient Sequence Number: 03

Percent: 3

NIOSH (RTECS) Number: KK8225000

CAS Number: 111-15-9 OSHA PEL: 100 PPM, S ACGIH TLV: 5 PPM, S

Proprietary: NO

Ingredient: POLYVINYL ACETATE; (POLYVINYL ACETATE POLYVINYL ALCOHOL

BUTYRAL)

Ingredient Sequence Number: 04
Percent: 5
NIOSH (RTECS) Number: 1008041PA
CAS Number: 68648-78-2
OSHA PEL: N/K (FP N)
ACGIH TLV: N/K (FP N)

Proprietary: NO

Ingredient: ANTIMONY OXIDE; (ANTIMONY TRIOXIDE) (SARA 313) (CERCLA)

Ingredient Sequence Number: 05

Percent: 10

NIOSH (RTECS) Number: CC5650000

CAS Number: 1309-64-4 OSHA PEL: 0.5 MG/MB (SB) ACGIH TLV: 0.5 MG/MB (SB)

Proprietary: NO

Ingredient: MOLYBDENUM SULFIDE; (MOLYBDENUM DISULFIDE)

Ingredient Sequence Number: 06

Percent: 10

NIOSH (RTECS) Number: QA4697000

CAS Number: 1317-33-5 OSHA PEL: 5 MG/M3 MO ACGIH TLV: 5 MG/M3 MO

Proprietary: NO

Ingredient: BASIC LEAD PHOSPHITE; (LEAD OXIDE PHOSPHONATE)

Ingredient Sequence Number: 07

Percent: 3

NIOSH (RTECS) Number: 1004581PB

CAS Number: 12141-20-7 OSHA PEL: RULE IN PROCESS ACGIH TLV: 0.15 MG/M3 PB

Proprietary: NO

Ingredient: RESIN; (PHENYL ESTER RESIN)

Ingredient Sequence Number: 08

Percent: 2

NIOSH (RTECS) Number: 1000250RE

OSHA PEL: N/K (FP N) ACGIH TLV: N/K (FP N)

Proprietary: NO

Ingredient: VOLATILE ORGANIC COMPOUND, INCLUSIVE AND EXCLUSIVE OF WATER

AND EXEMPT COMPOUNDS: 725 G/L Ingredient Sequence Number: 09 NIOSH (RTECS) Number: 9999999V0

OSHA PEL: N/K (FP N) ACGIH TLV: N/K (FP N)

Proprietary: NO

Ingredient: SUPDAT: LATEST HAZ LIST INFO & SAFE HNDLG & EXPOS INFO (FP N).

SKIN: NONE KNOWN. INHAL/INGEST: SAME AS ACUTE EFTS. (ING 11)

Ingredient Sequence Number: 10 NIOSH (RTECS) Number: 9999999ZZ

OSHA PEL: NOT APPLICABLE ACGIH TLV: NOT APPLICABLE

Proprietary: NO

Ingredient: ING 10: COMMENTS: TRANSIENT SKIN ERRUPTIONS/LESIONS ("ANTIMONY

MEASLES") MAY FORM AFTER PRLNGD/RPTD SKIN CNTCT. (ING 12)

Ingredient Sequence Number: 11 NIOSH (RTECS) Number: 9999999ZZ

OSHA PEL: NOT APPLICABLE ACGIH TLV: NOT APPLICABLE

Proprietary: NO

Ingredient: ING 11: WHEN HEATED TO TEMPS >150C IN PRESENCE OF AIR, PROD CAN

FORM FORMALDEHYDE VAPS. FORMALDEHYDE IS POTNTL (ING 13)

Ingredient Sequence Number: 12 NIOSH (RTECS) Number: 9999999ZZ

OSHA PEL: NOT APPLICABLE ACGIH TLV: NOT APPLICABLE

Proprietary: NO

Ingredient: ING 12: CANCER HAZ, KNOWN SKIN & RESP SENSITIZER & IRRITANT TO

EYES, NOSE, THROAT, SKIN & DIGEST SYS. SAFE HNDLG (ING 14)

Ingredient Sequence Number: 13 NIOSH (RTECS) Number: 9999999ZZ

OSHA PEL: NOT APPLICABLE ACGIH TLV: NOT APPLICABLE

Proprietary: NO

Ingredient: ING 13: OPERATIONS MAY BE MAINTAINED BY KEEPING VAPOR CONCS W/

IN OSHA PEL FOR FORMALDEHYDE. Ingredient Sequence Number: 14 NIOSH (RTECS) Number: 9999999ZZ

OSHA PEL: NOT APPLICABLE ACGIH TLV: NOT APPLICABLE

Proprietary: NO

Ingredient: SPILL PROC: ABSORB, ETC, USED DURING CLEANUP ONLY IN APPROP

CNTNRS OR COVERED W/WATER. DETERMINE WHETHER TO (ING 16)

Ingredient Sequence Number: 15 NIOSH (RTECS) Number: 9999999ZZ

OSHA PEL: NOT APPLICABLE ACGIH TLV: NOT APPLICABLE

Proprietary: NO

Ingredient: ING 15: EVACUATE/ISOLATE AREA DEPENDING ON SUCH SPECIFIC

FACTORS AS SITE LOCATION, POPULATION DENSITY, TRAFFIC (ING 17)

Ingredient Sequence Number: 16 NIOSH (RTECS) Number: 9999999ZZ

OSHA PEL: NOT APPLICABLE ACGIH TLV: NOT APPLICABLE

Proprietary: NO

Ingredient: ING 16: FLOW, SIZE OF RELS/SPILL, WEATHER CNDTNS, MATL'S HAZS &

RISKS TO PEOPLE & IF FIRE IS UNDERWAY/POSS. MOP/ (ING 18)

Ingredient Sequence Number: 17 NIOSH (RTECS) Number: 9999999ZZ

OSHA PEL: NOT APPLICABLE ACGIH TLV: NOT APPLICABLE

Proprietary: NO

Ingredient: ING 17: WIPE/SOAK UP W/ABSORB & CNTN FOR SALVAGE/DISP. CLEAN

ANY REMAINING SLIPPERY SURFS BY APPROP TECHNIQUES (ING 19)

Ingredient Sequence Number: 18 NIOSH (RTECS) Number: 9999999ZZ

OSHA PEL: NOT APPLICABLE ACGIH TLV: NOT APPLICABLE

Proprietary: NO

Ingredient: ING 18: SUCH AS: SEVERAL MOPPINGS/SWABBINGS W/APPROP SOLVS;

WASHING W/MILD, CAUSTIC DETERGENTS/SOLNS; HIGH PRESS (ING 20)

Ingredient Sequence Number: 19 NIOSH (RTECS) Number: 9999999ZZ

OSHA PEL: NOT APPLICABLE ACGIH TLV: NOT APPLICABLE

Proprietary: NO

Ingredient: ING 19: STEAM FOR LG AREAS. FOR NONSILICONES, USE TYPICAL INDUS

CLEANING MATLS. OBSERVE SFTY PRECS APPLIC TO (ING 21)

Ingredient Sequence Number: 20 NIOSH (RTECS) Number: 9999999ZZ

OSHA PEL: NOT APPLICABLE ACGIH TLV: NOT APPLICABLE

Proprietary: NO

Ingredient: ING 20: CLEANING MATL USED. LG SPILLS: PROVIDE DIKING/OTHER

APPROP CONTAINMENT TO KEEP MATL FROM SPREAD. OBSERVE (ING 22)

Ingredient Sequence Number: 21 NIOSH (RTECS) Number: 9999999ZZ

OSHA PEL: NOT APPLICABLE ACGIH TLV: NOT APPLICABLE

Proprietary: NO

Ingredient: ING 21: ALL PERSONAL PROT EQUIP RECOMS. LOC, STATE & FED

REPORTING REQS MAY APPLY TO SPILLS/RELS OF MATL INTO (ING 23)

Ingredient Sequence Number: 22 NIOSH (RTECS) Number: 9999999ZZ

OSHA PEL: NOT APPLICABLE ACGIH TLV: NOT APPLICABLE

Proprietary: NO

Ingredient: ING 22: ENVIRONMENT. PROT EQUIP: EYES: ANSI APPRVD FULL FACE

RESP. SKIN: WASH @ MEALS & END OF SHIFT. REMOVE CONTAMD(ING 24)

Ingredient Sequence Number: 23 NIOSH (RTECS) Number: 9999992Z

OSHA PEL: NOT APPLICABLE ACGIH TLV: NOT APPLICABLE

Proprietary: NO

Ingredient: ING 23; CLTHG & SHOES AS SOON AS PRACTICAL & THOROUGHLY CLEAN

BEFORE REUSE. CHEM PROT GLOVES RECOM USE NIOSH (ING 25)

Ingredient Sequence Number: 24 NIOSH (RTECS) Number: 9999999ZZ

OSHA PEL: NOT APPLICABLE ACGIH TLV: NOT APPLICABLE

Proprietary: NO

Ingredient: ING 24: APPRVD SCBA/OTHER SUPPLIED-AIR RESP. AVOID EYE & SKIN

CNTCT & BRTHG VAP. KEEP CNTNR CLSD. DO NOT TAKE INTERNALLY.

Ingredient Sequence Number: 25 NIOSH (RTECS) Number: 9999999ZZ

OSHA PEL: NOT APPLICABLE ACGIH TLV: NOT APPLICABLE

Physical/Chemical Characteristics

Appearance And Odor: BLACK LIQUID; SOLVENT ODOR.

Melting Point: N/A Specific Gravity: 1.01 Solubility In Water: NONE

pH: N/A

Fire and Explosion Hazard Data

Flash Point: 54.0F, 12.2C Flash Point Method: CC

Extinguishing Media: WATER FOG (OR SPRAY). CARBON DIOIXDE. DRY CHEMICAL.

FOAM WATER IS UNSUITABLE EXTINGUISHING AGENT.

Special Fire Fighting Proc: USE NIOSH APPRVD SCBA & FULL PROT EQUIPMENT (FP N). EVACUATE AREA IN CASE OF OVERHEATING OR FIRE. HEAT EXPOSURE PRESSURIZES CLSD CNTNRS. COOL W/WATER SPRAY.

Unusual Fire And Expl Hazrds: VAPS ARE HVR/AIR & CAN TRAVEL ALONG GROUND TO REMOVE IGNIT SOURCES. STATIC ELEC MAY ACCUM & IGNITE VAPS. PVNT POSS FIRE HAZ BY SUITABLE MEANS, SUCH AS (SUPDAT)

Reactivity Data

Stability: YES

Cond To Avoid (Stability): NONE.

Materials To Avoid: OXIDIZING MATERIAL CAN CAUSE A REACTION.

Hazardous Decomp Products: THERMAL BREAKDOWN OF PROD DURING FIRE/VERY HIGH

HEAT CNDTNS: CARBON OXIDES & TRACES OF INCOMPLETELY BURNED (SUPDAT)

Hazardous Pol v Occur: NO

Conditions To Avoid (Poly): NOT RELEVANT.

Health Hazard Data

LD50-LC50 Mixture: NONE SPECIFIED BY MANUFACTURER.

Route Of Entry - Inhalation: YES

Route Of Entry - Skin: YES

Route Of Entry - Ingestion: YES

Health Haz Acute And Chronic: ACUTE: EYES: DIRECT CNTCT MAY IRRIT SERIOUSLY W/MOD TO SEV REDNESS, SWELL & SOME CORNEAL INJURY LASTING SEVERAL DAYS TO WK. SKIN: SINGLE RELATIVELY SHORT EXPOS (<24 HRS) IRRIT. RPTD PRLNGD CNTCT (24-48 HRS) IRRIT SERIOUSLY, MAY BURN MILDLY, OVEREXP BY SKIN ABSORPTION MAY INJURE: BLOOD, KIDNEYS, NERVOUS (EFTS OF OVEREXP)

Carcinogenicity - NTP: NO

Carcinogenicity - IARC: YES

Carcinogenicity - OSHA: NO

Explanation Carcinogenicity: ANTIMONY TRIOXIDE: IARC MONOGRAPHS ON EVAL OF CARCIN RISK OF CHEMICALS TO MAN, VOL 47, PG 291, 1989: GROUP 2B.

Signs/Symptoms Of Overexp: HLTH HAZ: SYS. INHAL: SHORT VAP EXPOS MAY CAUSE DROW, IRRIT NOSE & THROAT & CAUSE INJURY TO: BLOOD, LUNGS, LIVER, KIDNEYS, NERVOUS SYS. INGEST: INHAL LIQ WHILE VOMIT CAN INJURE LUNGS SERIOUSLY. SM

AMI'S TRANSFERRED TO MOUTH BY FINGERS DURING USE, ETC, MAY INJURE: HEART, BLOOD LIVER, KIDNEYS, NERVOUS SYS. CHRONIC: (SUPDAT)

Med Cond Aggravated By Exp: NONE SPECIFIED BY MANUFACTURER.

Emergency/First Aid Proc: EYES: IMMEDIATELY FLUSH WITH WATER FOR AT LEAST 15 MINUTES. GET MED ATTENTION. SKIN: REMOVE FROM SKIN & IMMEDIATELY FLUSH WITH WATER FOR 15 MINUTES. GET MED ATTENTION IF IRRITATION OR ILL EFFECTS DEVELOP OR PERSIST. INHALATION: REMOVE TO FRESH AIR. GET MED ATTENTION. DO NOT INDUCE VOMITING. COMMENTS: TREAT ACCORDING TO PERSON'S CONDITION AND SPECIFICS OF EXPOSURE.

Precautions for Safe Handling and Use

Steps If Matl Released/Spill: DISP OF COLLECTED PROD, RESIDUES & CLEANUP MATLS MAY BE GOVT REGULATED. OBSERVE ALL APPLIC LOC, STATE & FED WASTE MANAGEMENT REGS. REMOVE POSS IGNIT SOURCES & IF NEEDED, USE NONSPKG TOOLS & EQUIP. TO PVNT POSSSPONT COMBUST, STORE RAGS, MOPS, (ING 15)

Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.

Waste Disposal Method: DISPOSAL MUST BE IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS (FP N). COMPLETE INFORMATION NOT YET AVAILABLE. CALL DOW CORNING ENVIRONMENTAL MGMT 517-496-6315, IF MORE INFORMATION IS DESIRED.

Precautions-Handling/Storing: KEEP CONTAINER CLOSED AND AWAY FROM HEAT, SPARKS AND OPEN FLAME.

Other Precautions: NONE SPECIFIED BY MANUFACTURER.

Control Measures

Respiratory Protection: USE NIOSH APPRVD RESP PROT (ORGANIC VAP TYPE)

UNLESS ADEQ LOC EXHST VENT IS PROVIDED OR AIR SAMPLING DATA SHOW EXPOS ARE W/IN RECOMD EXPOS GUIDELINES. INDUSTRIAL HYGIENE PERS CAN ASSIST IN JUDGING ADEQUACY OF EXISTING ENGINEERING CONTROLS.

Ventilation: LOCAL EXHAUST: RECOMMENDED. GENERAL VENTILATION: RECOMMENDED. Protective Gloves: CHEMICAL PROTECTIVE GLOVES.

Eye Protection: ANSI APPRVD CHEM WORKERS GOGGLES (FP N).

Other Protective Equipment: ANSI APPROVED EYE WASH AND DELUGE SHOWER (FP N).

Work Hygienic Practices: WASH AT MEALTIME AND END OF SHIFT. REMOVE CONTAMD CLTHG AND SHOES AS SOON AS PRACTICAL & THOROUGHLY CLEAN BEFORE REUSE. Suppl. Safety & Health Data: EXPLO HAZ: BONDING & GROUNDING, INERT GAS PURGE, VAPOR DILUTION & THE LIKE. HAZ DECOMP PRODS: CARBON CMPDS. CHLORINE CMPDS. PHOSPHORUS OXIDES. METAL OXIDES. SULFUR OXIDES. FORMALDEHYDE. EFTS OF OVEREXP: LEAD APPEARS ON THE NAVY LIST OF OCCUP CHEM REPRO HAZS. SEEK CONSULTATION FROM APPROP HLTH HAZS CONCERNING (ING 10)

Transportation Data

Disposal Data

Label Data

Label Required: YES

Technical Review Date: 15MAY97

Label Date: 29APR97 Label Status: G

Common Name: MOLYKOTE 3402C BONDED LUBRICANT

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Chronic Hazard: YES Signal Word: DANGER!

Acute Health Hazard-Severe: X

Contact Hazard-Severe: X Fire Hazard-Severe: X Reactivity Hazard-None: X

Special Hazard Precautions: FLAMMABLE. ACUTE: EYES: MODERATE TO SEVERE REDNESS, SWELLING AND SOME CORNEAL INJURY. SKIN: REPEATED PROLONGED CONTACT IRRITATES SERIOUSLY, MAY BURN MILDLY. SKIN ABSORPTION MAY INJURE BLOOD, KIDNEYS, NERVOUS SYSTEM. INHALATION: DROWSINESS AND IRRITATION TO NOSE AND THROAT. CAN CAUSE INJURY TO BLOOD, LUNGS, LIVER, KIDNEYS, NERVOUS SYSTEM. INGESTION: MAY INJURE HEART, BLOOD, LIVER, KIDNEYS, NERVOUS SYSTEM. ASPIRATION CAN SERIOUSLY INJURE LUNGS. CHRONIC: CANCER HAZARD. CONTAINS ANTIMONY TRIOXIDE WHICH IS LISTED AS AN ANIMAL LIVER CARCINOGEN (FP N). LEAD APPEARS ON THE NAVY OCCUPATIONAL CHEMICAL REPRODUCTIVE HAZARDS LIST (FP N).

Protect Eye: Y Protect Skin: Y

Protect Respiratory: Y

Label Name: DOW CORNING CORP Label Street: SOUTH SAGINAW RD

Label City: MIDLAND Label State: MI

Label Zip Code: 48686 Label Country: US

Label Emergency Number: 517-496-5900; 800-424-9300 (CHEMTREC)

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