



Revision Number: 002.2

Issue date: 09/14/2010

1. PRODUCT AND COMPANY IDENTIFICATION

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|-------------------------------|--|---------------------|---------------|
| Product name: | Moly Dry Film Lubricant | IDH number: | 226675 |
| Product type: | Lubricant | Item number: | 39895 |
| | | Region: | United States |
| Company address: | Contact information: | | |
| Henkel Corporation | Telephone: 860.571.5100 | | |
| One Henkel Way | MEDICAL EMERGENCY Phone: Poison Control Center | | |
| Rocky Hill, Connecticut 06067 | 1-877-671-4608 (toll free) or 1-303-592-1711 | | |
| | TRANSPORT EMERGENCY Phone: CHEMTREC | | |
| | 1-800-424-9300 (toll free) or 1-703-527-3887 | | |
| | Internet: www.henkelna.com | | |

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

| | | | |
|------------------------|---|-----------------------------|--------------------|
| Physical state: | Aerosol, liquid | HEALTH: | *1 |
| Color: | dark grey | FLAMMABILITY: | 4 |
| Odor: | Solvent | PHYSICAL HAZARD: | 2 |
| | | Personal Protection: | See MSDS Section 8 |
| DANGER: | EXTREMELY FLAMMABLE LIQUID AND VAPOR. CONTAINS MATERIAL WHICH MAY CAUSE CANCER. VAPOR MAY CAUSE FLASH FIRE. MAY BE HARMFUL IF SWALLOWED OR INHALED. MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION. | | |

Relevant routes of exposure: Not available

Potential Health Effects

| | |
|----------------------|---|
| Inhalation: | Inhalation of vapors or mists of the product may be irritating to the respiratory system. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. |
| Skin contact: | May be harmful if absorbed through skin. Solvent action can dry and defat the skin, causing the skin to crack, leading to dermatitis. |
| Eye contact: | Vapors may irritate eyes. Contact with eyes will cause irritation. |
| Ingestion: | Harmful if swallowed. |

Existing conditions aggravated by exposure: Not available

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

| Hazardous components | CAS NUMBER | % |
|--|------------|---------|
| Acetone | 67-64-1 | 30 - 60 |
| Methyl ethyl ketone | 78-93-3 | 10 - 30 |
| Butane | 106-97-8 | 10 - 30 |
| Propane | 74-98-6 | 10 - 30 |
| Molybdenum disulphide | 1317-33-5 | 1 - 5 |
| 1,2,4-Trimethylbenzene | 95-63-6 | 1 - 5 |
| Solvent naphtha (petroleum), light arom. | 64742-95-6 | 1 - 5 |
| Graphite | 7782-42-5 | 1 - 5 |
| Toluene | 108-88-3 | 0.1 - 1 |

4. FIRST AID MEASURES

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|----------------------|---|
| Inhalation: | Move to fresh air. If symptoms persist, seek medical advice. |
| Skin contact: | Rinse with running water and soap. If symptoms develop and persist, get medical attention. |
| Eye contact: | Rinse immediately with plenty of running water (for 10 minutes). Seek medical attention if necessary. |
| Ingestion: | Rinse out mouth, drink 1-2 glasses of water, do not induce vomiting. Seek medical advice. |

5. FIRE FIGHTING MEASURES

| | |
|--|--|
| Flash point: | -42.00 °C (-43.6 °F) ; Estimated |
| Flashback: | This product exhibits flashback when tested for flame extension. |
| Autoignition temperature: | Not available |
| Flammable/Explosive limits - lower: | Not available |
| Flammable/Explosive limits - upper: | Not available |
| Extinguishing media: | Carbon dioxide, foam, powder |
| Special firefighting procedures: | Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear. |
| Unusual fire or explosion hazards: | Cool aerosol containers with jet of water. Containers may explode. |
| Hazardous combustion products: | Oxides of carbon, oxides of nitrogen, irritating organic vapors. |

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

| | |
|-----------------------------------|--|
| Environmental precautions: | Do not let product enter drains. |
| Clean-up methods: | For small spills wipe up with paper towel and place in container for disposal. For large spills absorb onto inert absorbent material and place in sealed container for disposal. |

7. HANDLING AND STORAGE

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|------------------|---|
| Handling: | Keep away from sources of ignition - no smoking. Do not inhale vapors and fumes. Use only in well-ventilated areas. Avoid skin and eye contact. |
|------------------|---|

Storage:

Store away from heat, sparks, flames, or other sources of ignition.

Shelf Life Statement: Not available**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

| Hazardous components | ACGIH TLV | OSHA PEL | AIHA WEEL | OTHER |
|--|--|--|-----------|--------|
| Acetone | 500 ppm TWA 750 ppm STEL | 1,000 ppm (2,400 mg/m ³) TWA | None | None |
| Methyl ethyl ketone | 200 ppm TWA 300 ppm STEL | 200 ppm (590 mg/m ³) TWA | None | None |
| Butane | 1,000 ppm TWA | None | None | None |
| Propane | 1,000 ppm TWA | 1,000 ppm (1,800 mg/m ³) TWA | None | None |
| Molybdenum disulphide | 10 mg/m ³ TWA (as Mo) Inhalable fraction. 3 mg/m ³ TWA (as Mo) Respirable fraction. | 15 mg/m ³ TWA (as Mo) Total dust. | None | None |
| 1,2,4-Trimethylbenzene | 25 ppm TWA | None | None | None |
| Solvent naphtha (petroleum), light arom. | None | None | None | 50 ppm |
| Graphite | 2 mg/m ³ TWA Respirable fraction. | 5 mg/m ³ TWA Respirable fraction. 15 mg/m ³ TWA Total dust. 15 MPPCF TWA | None | None |
| Toluene | 20 ppm TWA | 200 ppm TWA 300 ppm Ceiling 500 ppm MAX. CONC 10 minutes | None | None |

Engineering controls:

Use local ventilation if general ventilation is insufficient to maintain vapor concentration below established exposure limits.

Respiratory protection:

Use a NIOSH approved air-purifying respirator with an organic vapor cartridge.

Eye/face protection:

Safety goggles or safety glasses with side shields.

Skin protection:

Use impermeable gloves and protective clothing as necessary to prevent skin contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

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|---|--|
| Physical state: | Aerosol, liquid |
| Color: | dark grey |
| Odor: | Solvent |
| Odor threshold: | Not available |
| pH: | Not available |
| Vapor pressure: | Not available |
| Boiling point/range: | Not available |
| Melting point/ range: | Not available |
| Vapor density: | Not available |
| Flash point: | -42.00 °C (-43.6 °F) ; Estimated |
| Flashback: | This product exhibits flashback when tested for flame extension. |
| Flammable/Explosive limits - lower: | Not available |
| Flammable/Explosive limits - upper: | Not available |
| Autoignition temperature: | Not available |
| Evaporation rate: | Not available |
| Solubility in water: | Not available |
| Partition coefficient (n-octanol/water): | Not available |
| VOC content: | 47.92 % (calculated) |

10. STABILITY AND REACTIVITY

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|--|---|
| Stability: | Stable |
| Hazardous reactions: | Will not occur. |
| Hazardous decomposition products: | Oxides of carbon. |
| Incompatible materials: | Acids and bases. Oxidizing agents. Heat. |
| Conditions to avoid: | Heat, flames, sparks and other sources of ignition. |

11. TOXICOLOGICAL INFORMATION

| Hazardous components | NTP Carcinogen | IARC Carcinogen | OSHA Carcinogen (Specifically Regulated) |
|--|----------------|-----------------|---|
| Acetone | No | No | No |
| Methyl ethyl ketone | No | No | No |
| Butane | No | No | No |
| Propane | No | No | No |
| Molybdenum disulphide | No | No | No |
| 1,2,4-Trimethylbenzene | No | No | No |
| Solvent naphtha (petroleum), light arom. | No | No | No |
| Graphite | No | No | No |
| Toluene | No | No | No |

| Hazardous components | Health Effects/Target Organs |
|--|---|
| Acetone | Blood, Central nervous system, Irritant, Reproductive |
| Methyl ethyl ketone | Irritant, Central nervous system |
| Butane | Cardiac, Central nervous system, Irritant |
| Propane | Cardiac, Central nervous system, Irritant |
| Molybdenum disulphide | No Target Organs |
| 1,2,4-Trimethylbenzene | Central nervous system, Irritant, Respiratory |
| Solvent naphtha (petroleum), light arom. | Irritant |
| Graphite | Lung |
| Toluene | Behavioral, Cardiac, Central nervous system, Developmental, Ear, Irritant |

12. ECOLOGICAL INFORMATION

Ecological information:

No specific studies have been conducted by Henkel on the ecotoxicity or environmental fate of this material; however, commonly available data on the material indicate that uncontrolled releases to soil, ground water, or surface waters could entail acute and/or chronic ecological effects, depending on the quantity and concentration of such releases. Releases of volatile components to the atmosphere are not believed to entail significant ecological consequences provided such releases are within the exposure levels set forth in this document. Accordingly, all appropriate measures should be taken to avoid uncontrolled releases to the environment, and any spills or other uncontrolled releases which may occur should be contained and cleaned up immediately in accordance with Section 6.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Dispose of according to Federal, State and local governmental regulations.
Hazardous waste number: D001: Ignitable.

14. TRANSPORT INFORMATION

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: Aerosols
Hazard class or division: 2.1
Identification number: UN 1950
Packing group: None
DOT Reportable quantity: Acetone, Methyl ethyl ketone

International Air Transportation (ICAO/IATA)

Proper shipping name: Aerosols, flammable
Hazard class or division: 2.1
Identification number: UN 1950
Packing group: None

Water Transportation (IMO/IMDG)

Proper shipping name: AEROSOLS
Hazard class or division: 2.1
Identification number: UN 1950
Packing group: None

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.
TSCA 12(b) Export Notification: None above reporting de minimus
CERCLA/SARA Section 302 EHS: None above reporting de minimus
CERCLA/SARA Section 311/312: Fire, Pressure, Immediate Health, Delayed Health
CERCLA/SARA 313: This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). Methyl ethyl ketone (CAS# 78-93-3). 1,2,4-Trimethylbenzene (CAS# 95-63-6).
California Proposition 65: This product contains a chemical known in the State of California to cause cancer. This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Canada Regulatory Information

CEPA DSL/NDSL Status: All components are listed on or are exempt from listing on the Canadian Domestic Substances List.
WHMIS hazard class: A, B.5, D.2.A, D.2.B

16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: New Material Safety Data Sheet format.

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