Safety Data Sheet

Revision Number: 005.0

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1. PRODUCT AND COMPANY IDENTIFICATION

Product name: **LOCTITE LB 8017 SOLID FILM LUBRICANT known as Moly Dry Film**

IDH number: 233503

Product type: Lubricant

Item number: 39897

Restriction of Use: None identified

Region: United States

Company address:
Henkel Corporation
One Henkel Way
Rocky Hill, Connecticut 06067

Contact information:
Telephone: +1 (860) 571-5100
MEDICAL EMERGENCY Phone: Poison Control Center
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

DANGER**:**

FLAMMABLE LIQUID AND VAPOR.
MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS.
CAUSES SKIN IRRITATION.
CAUSES SERIOUS EYE IRRITATION.
MAY CAUSE RESPIRATORY IRRITATION.
MAY CAUSE DROWSINESS OR DIZZINESS.
SUSPECTED OF DAMAGING FERTILITY OR THE UNBORN CHILD.
MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE.

HAZARD CLASS	HAZARD CATEGORY
FLAMMABLE LIQUID	3
SKIN IRRITATION	2
EYE IRRITATION	2A
REPRODUCTIVE TOXICITY	2
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE	3
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	2
ASPIRATION HAZARD	1

PICTOGRAM(S)

Precautionary Statements

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, sparks, open flames, hot surfaces - no smoking. Keep container tightly closed. No release into water. Use explosion-proof equipment. Use non-sparking tools. Take action to prevent static discharges. Do not breathe vapors, mist, or spray. Wash affected area thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves, clothing, eye and face protection.

Response: IF SWALLOWED: Immediately call a physician or poison control center. If on skin (or hair): Take off immediately all contaminated clothing. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical attention. Do NOT induce vomiting. If skin irritation occurs: Get medical attention. If eye irritation persists: Get medical attention. Take off contaminated clothing. In case of fire: Use foam, dry chemical or carbon dioxide to extinguish.

Storage: Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.

Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
Molybdenum disulphide	1317-33-5	20 - 30
1,2,4-Trimethylbenzene	95-63-6	10 - 20
Solvent naphtha (petroleum), light arom., <0.1% Benzene	64742-95-6	10 - 20
Graphite	7782-42-5	10 - 20
Toluene	108-88-3	1 - 5
Mesitylene	108-67-8	1 - 5
Xylenes	1330-20-7	0.1 - 1
Cumene	98-82-8	0.1 - 1
Ethylbenzene	100-41-4	0.1 - 1

* Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Inhalation: Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Skin contact: Remove contaminated clothing and footwear. Wash with soap and water. If symptoms develop and persist, get medical attention. Wash clothing before reuse.

Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

Ingestion: Do not induce vomiting. Aspiration may cause pulmonary edema and pneumonitis. Never give anything by mouth to an unconscious person. Get medical attention.

Symptoms: See Section 11.

5. FIRE FIGHTING MEASURES

Extinguishing media: Foam, dry chemical or carbon dioxide. Do not use high volume water jet.

Special firefighting procedures: Wear a self-contained breathing apparatus with a full face piece operated in pressure-demand or other positive pressure mode. Wear full protective clothing.

Unusual fire or explosion hazards: Approach fire from upwind to avoid hazardous vapors and toxic decomposition products. In case of fire, keep containers cool with water spray.

Hazardous combustion products: Oxides of carbon. Oxides of sulfur.

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 allow product to enter sewer or waterways.

Clean-up methods: Ensure adequate ventilation. Remove all sources of ignition. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up spilled material. Avoid creating dust. Store in a partly filled, closed container until disposal.

7. HANDLING AND STORAGE

Handling: Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Make sure containers are properly grounded before use or transfer of material. Refer to Section 8.

Storage: Keep in a cool, well ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready for use.

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 Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Molybdenum disulphide	10 mg/m3 TWA (as Mo) Inhalable fraction. 3 mg/m3 TWA (as Mo) Respirable fraction.	15 mg/m3 PEL (as Mo) Total dust.	None	None
1,2,4-Trimethylbenzene	25 ppm TWA	None	None	None
Solvent naphtha (petroleum), light arom., <0.1% Benzene	None	100 ppm (400 mg/m3) PEL	None	50 ppm
Graphite	2 mg/m3 TWA Respirable fraction.	5 mg/m3 PEL Respirable fraction. 15 mg/m3 PEL 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
Mesitylene	25 ppm TWA	None	None	None
Xylenes	100 ppm TWA 150 ppm STEL	100 ppm (435 mg/m3) PEL	None	None
Cumene	50 ppm TWA	50 ppm (245 mg/m3) PEL (SKIN)	None	None
Ethylbenzene	20 ppm TWA	100 ppm (435 mg/m3) PEL	None	None

Engineering controls: Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

Respiratory protection:	Observe OSHA regulations for respirator use (29 CFR 1910.134). Use NIOSH approved respirator if there is potential to exceed exposure limit(s).
Eye/face protection:	Safety goggles or safety glasses with side shields. Full face protection should be used if the potential for splashing or spraying of product exists. Safety showers and eye wash stations should be available.
Skin protection:	Use chemical resistant, impermeable clothing including gloves and either an apron or body suit to prevent skin contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Color:	Gray
Odor:	Characteristic
Odor threshold:	Not available.
pH:	Not available.
Vapor pressure:	Not available.
Boiling point/range:	169 - 336 °F (76.1 - 168.9 °C)None
Melting point/ range:	Not available.
Specific gravity:	1.5103
Vapor density:	Heavier than air.
Flash point:	29 °C (84.2 °F)
Flammable/Explosive limits - lower:	0.9 %
Flammable/Explosive limits - upper:	7 %
Autoignition temperature:	Not determined
Flammability:	Not applicable
Evaporation rate:	Slower than butyl acetate.
Solubility in water:	Not miscible
Partition coefficient (n-octanol/water):	Not available.
VOC content:	48.79 %; 637 g/l
Viscosity:	Not available.
Decomposition temperature:	Not available.

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions of storage and use.
Hazardous reactions:	None under normal processing.
Hazardous decomposition products:	Oxides of carbon. Oxides of sulfur. Irritating vapors.
Incompatible materials:	Oxidizing agents. Strong acids and strong bases. Hydrogen peroxide.
Reactivity:	Not available.
Conditions to avoid:	Prolonged exposure to heat. Store away from incompatible materials.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes, Ingestion

Potential Health Effects/Symptoms

Inhalation: Central nervous system depression, including dizziness, drowsiness, fatigue, nausea, headache, unconsciousness. May cause respiratory irritation. May be harmful if inhaled.
Skin contact: Causes skin irritation. Repeated or prolonged contact can result in drying of skin.
Eye contact: Causes serious eye irritation.
Ingestion: Principal hazard of ingestion is aspiration into the lungs and subsequent pneumonitis.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Molybdenum disulphide	None	No Target Organs
1,2,4-Trimethylbenzene	Oral LD50 (Rat) = 6.0 g/kg Dermal LD50 (Rabbit) = > 3,160 mg/kg	Central nervous system, Irritant, Respiratory
Solvent naphtha (petroleum), light arom., <0.1% Benzene	None	Irritant
Graphite	None	Lung
Toluene	Oral LD50 (Rat) = 2.6 g/kg Oral LD50 (Rat) = 5,000 mg/kg Dermal LD50 (Rabbit) = 12,124 mg/kg Inhalation LC50 (Rat, 4 h) = 8000 ppm	Behavioral, Cardiac, Central nervous system, Developmental, Ear, Irritant
Mesitylene	None	Central nervous system, Irritant, Respiratory
Xylenes	Oral LD50 (Mouse) = 1,590 mg/kg Oral LD50 (Rat) = 6,670 mg/kg Oral LD50 (Rat) = 3,523 - 8,600 mg/kg Oral LD50 (Mouse) = 5,627 mg/kg Oral LD50 (Rat) = 4,300 mg/kg Dermal LD50 (Rabbit) = > 43 g/kg Inhalation LC50 (Rat, 4 h) = 6,350 mg/l	Cardiac, Central nervous system, Irritant, Kidney, Liver
Cumene	Oral LD50 (Rat) = 2.91 g/kg Oral LD50 (Rat) = 1,400 mg/kg Inhalation LC50 (Rat, 4 h) = 8000 ppm	Central nervous system, Irritant, Lung
Ethylbenzene	Oral LD50 (Rat) = 5.46 g/kg Oral LD50 (Rat) = 3,500 mg/kg Dermal LD50 (Rabbit) = 17,800 mg/kg	Irritant, Central nervous system

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Molybdenum disulphide	No	No	No
1,2,4-Trimethylbenzene	No	No	No
Solvent naphtha (petroleum), light arom., <0.1% Benzene	No	No	No
Graphite	No	No	No
Toluene	No	No	No
Mesitylene	No	No	No
Xylenes	No	No	No
Cumene	Reasonably Anticipated to be a Human Carcinogen.	Group 2B	No
Ethylbenzene	No	Group 2B	No

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal:	Follow all local, state, federal and provincial regulations for disposal.
Hazardous waste number:	D001: Ignitable. This product may contain traces of: D018: Benzene (Check TCLP Level).

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

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

Proper shipping name:	Paint
Hazard class or division:	3
Identification number:	UN 1263
Packing group:	III
DOT Hazardous Substance(s):	Xylene (mixed), Toluene

International Air Transportation (ICAO/IATA)

Proper shipping name:	Paint
Hazard class or division:	3
Identification number:	UN 1263
Packing group:	III
Exceptions:	ID8000, (Not more than 500 ml), May Qualify as Consumer Commodity

Water Transportation (IMO/IMDG)

Proper shipping name:	PAINT (1,2,4-Trimethylbenzene, Solvent Naphtha (Petroleum), Light Aromatic)
Hazard class or division:	3
Identification number:	UN 1263
Packing group:	III
Marine pollutant:	1,2,4-Trimethylbenzene, Solvent Naphtha (Petroleum), Light Aromatic
Exceptions:	Limited quantity (Not more than 5 kg).

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 minimis
CERCLA/SARA Section 302 EHS:	None above reporting de minimis.
CERCLA/SARA Section 311/312:	Fire, Immediate Health, Delayed Health
CERCLA/SARA Section 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). 1,2,4-Trimethylbenzene (CAS# 95-63-6). Toluene (CAS# 108-88-3). Ethylbenzene (CAS# 100-41-4).
CERCLA Reportable quantity:	Toluene (CAS# 108-88-3) 1,000 lbs. (454 kg) Xylenes (CAS# 1330-20-7) 100 lbs. (45.4 kg)
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.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: 2, 3

Prepared by: Product Safety and Regulatory Affairs

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