

MATERIAL SAFETY DATA SHEET

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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Anti-Seize Lubricant
Item No.: 76764
Product Type: Lubricant

P-02

2. COMPOSITION, INFORMATION ON INGREDIENTS

| Ingredients | CAS No. | % |
|----------------------------|------------|-------|
| Mineral oil | 64742-52-5 | 25-50 |
| Graphite | 7782-42-5 | 15-20 |
| ALUMINUM | 7429-90-5 | 10-20 |
| GAS OIL | 64741-44-2 | 5-10 |
| ALUMINUM OXIDE | 1344-28-1 | 1-5 |
| COPPER* | 7440-50-8 | 1-5 |
| Hydrotreated heavy naphtha | 64742-48-9 | 1-5 |
| Lithium soap | 7620-77-1 | 1-3 |
| SILICA, QUARTZ | 14808-60-7 | 0.1-1 |

* This component is listed as a SARA Section 313 Toxic Chemical.

Ingredients which have exposure limits

| Exposure Limits (TWA) Ingredients | ACGIH (TLV) | OSHA (PEL) | OTHER |
|--------------------------------------|---------------------------------|----------------------------------|--------------|
| Mineral oil | 5 mg/m3 mist | 5 mg/m3 mist | 5 mg/m3 mist |
| Graphite | 2 mg/m3 resp | 15 mppcf 5 mg/m3 resp | None |
| ALUMINUM | 10 mg/m3 dust | 15 mg/m3 dust 5 mg/m3 respir. | None |
| GAS OIL | 5mg/m3 TWA mist | 5mg/m3 TWA mist | None |
| ALUMINUM OXIDE | 10 mg/m3 (A) | 15 mg/m3 dust 5 mg/m3 respir. | None |
| COPPER | 1 mg/m3 dust | 1 mg/m3 dust | None |
| Hydrotreated heavy naphtha | 5mg/m3 TWA mist | 5mg/m3 TWA mist | 400 ppm |
| SILICA, QUARTZ | 0.1mg/m3 TWA respirable dust | 0.1mg/m3 TWA respirable dust | None |

| Exposure Limits (STEL) Ingredients | ACGIH (TLV) | OSHA (PEL) |
|---------------------------------------|----------------|---------------|
| Mineral oil | 10 mg/m3 mist | None |
| GAS OIL | 10 mg/m3 mist | None |
| Hydrotreated heavy naphtha | 10 mg/m3 mist | None |

3. HAZARDS IDENTIFICATION

Toxicity: May irritate eyes or skin. Vapors or direct contact may irritate or burn nose and throat. Swallowing may irritate digestive tract and cause nervous system depression. Prolonged skin contact with copper may cause sensitization dermatitis. Copper dusts and mists are eye and mucous membrane irritants and skin sensitizers. Swallowing copper compounds may cause vomiting and collapse. Target organs include respiratory system, nasal septum, skin, eyes, gastrointestinal system, kidneys, liver, and cardiovascular system.

Primary Routes of Entry: Ingestion, inhalation, skin and eye contact.

Signs and Symptoms of Exposure: May cause skin or eye irritation with prolonged or repeated contact. Metal-fume fever, metallic taste, discoloration of skin or hair may indicate exposure to copper. Hemolysis, jaundice, anuria, hypotension, and convulsions may indicate acute copper poisoning.

Existing Conditions Aggravated by Exposure: Graphite powder: emphysema, asthma, and other respiratory problems.

LOCTITE CORPORATION

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ROCKY HILL, CT 06067-3910
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Product Name: Anti-Seize Lubricant
Item No.: 767643. HAZARDS IDENTIFICATION

(continued)

| Ingredients | Literature Referenced Target Organ and Other Health Effects | Carcinogen | | |
|----------------------------|--|------------|------|------|
| | | NTP | IARC | OSHA |
| Mineral oil | IRR | NO | NO | NO |
| Graphite | LUN | NO | NO | NO |
| ALUMINUM | CNS IRR LUN | NO | NO | NO |
| GAS OIL | IRR | NO | NO | NO |
| ALUMINUM OXIDE | COR IRR NUI | NO | NO | NO |
| COPPER | BLO CNS GAS IMM IRR KID LIV MUT SEN SKI | NO | NO | NO |
| Hydrotreated heavy naphtha | NTD | NO | NO | NO |
| Lithium soap | No Data | NO | NO | NO |
| SILICA, QUARTZ | IMM LUN SOM | YES | 2A | NO |

Abbreviations

| | |
|------------------------------------|--------------------------------------|
| 2A Probably carcinogenic to humans | BLO Blood |
| CNS Central nervous system | COR Corrosive |
| GAS Gastrointestinal | IMM Immune system |
| IRR Irritant | KID Kidney |
| LIV Liver | LUN Lung |
| MUT Mutagen | NTD No Target Organs |
| NUI Nuisance dust | SEN Sensory |
| SKI Skin | SOM Evidence of some carcinogenicity |

4. FIRST AID MEASURES

| | |
|---------------|---|
| Ingestion: | Do not induce vomiting. Keep individual calm. Obtain medical attention. |
| Inhalation: | Oil mist: Remove to fresh air. If symptoms persist, obtain medical attention. |
| Skin Contact: | Wash with soap and water. |
| Eye Contact: | Flush at least 15 minutes with water. Obtain medical attention. |

5. FIRE FIGHTING MEASURES

| | | |
|---|---|------------------------|
| Flash Point: | More than 200°F | Method: Tag Closed Cup |
| Recommended Extinguishing Agents: | Carbon dioxide, foam, dry chemical | |
| Special Firefighting Procedures: | Not available | |
| Hazardous Products formed by Fire or Thermal Decomp | Metal vapors, oxides of carbon, nitrogen, barium, zinc, sulfur; hydrogen sulfide. | |
| Unusual Fire or Explosion Hazards: | None | |
| Explosive Limits: | | |
| (% by volume in air) Lower | 30% Aluminum metal | |
| (% by volume in air) Upper | 1% Gas oil | |
| | Unknown Aluminum metal | |
| | 7% Gas oil | |

6. ACCIDENTAL RELEASE MEASURES

| | |
|---|--|
| Steps to be taken in case of spill or leak: | Remove sources of ignition. Take up with an inert absorbent. Store in a closed container until disposal. |
|---|--|

7. HANDLING AND STORAGE

| | |
|-------------------------------------|--|
| Safe Storage: | Keep away from sources of ignition and hot surfaces. |
| (Contact Loctite Customer Handling: | Service 1-800-243-4074 for shelf life information) |
| | Keep away from eyes. Avoid prolonged skin contact. |
| | Avoid prolonged breathing of vapors. |

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Product Name: Anti-Seize Lubricant
Item No.: 767648. EXPOSURE CONTROLS, PERSONAL PROTECTION

Eyes: Safety glasses or goggles.
Skin: Neoprene or oil resistant plastic gloves.
Ventilation: Provide adequate local ventilation to maintain vapor concentration below TLV if misting of oil occurs or compound becomes dry.
Respiratory: Not available
See Section 2 for Exposure Limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Silver paste
Odor: Petroleum
Boiling Point: Not available
pH: Does not apply
Solubility in Water: Nil
Specific Gravity: 1.1749
Volatile Organic Compound (EPA Method 24): 13.81%; 162 grams per liter
Vapor Pressure: Less than 5mm at 80°F
Vapor Density: Not available
Evaporation Rate (Ether = 1): Not available

10. STABILITY AND REACTIVITY

Stability: Stable
Hazardous Polymerization: Will not occur
Incompatibility: Strong oxidizers, alkalies, mineral acids, selected amines.
Conditions to Avoid: Not available
Hazardous Decomposition Products (non-thermal): Noxious carbon compounds, hydrogen.

11. TOXICOLOGICAL INFORMATION

See Section 3.

12. ECOLOGICAL INFORMATION

No data available

13. DISPOSAL CONSIDERATIONS

Recommended methods of disposal: Incinerate following EPA and local regulations.
EPA Hazardous Waste Number: NH - Not a RCRA Hazardous Waste Material

14. TRANSPORTATION INFORMATION

DOT (49 CFR 172)
Domestic Ground Transport
Proper Shipping Name: Unrestricted
Hazard Class or Division: Unrestricted
Identification Number: None
Marine Pollutant: None
IATA
Proper Shipping Name: Unrestricted
Class or Division: Unrestricted
UN or ID Number: None

15. REGULATORY INFORMATION

CA Proposition 65: No Prop65 chemicals are known to be present.

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Item No.: 76764

15. OTHER INFORMATION

Estimated NFPA(R) Code:

Health Hazard: 1
Fire Hazard: 1
Reactivity Hazard: 1
Specific Hazard: Does not apply

Estimated HMIS(R) Code:

Health Hazard: 1*
Flammability Hazard: 1
Reactivity Hazards: 1
Personal Protection: See Section 8.

NFPA is a registered trademark of the National Fire Protection Assn.
HMIS is a registered trademark of the National Paint and Coatings Assn.

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