

LOCTITE CORPORATION

1001 TROUT BROOK CROSSING  
 ROCKY HILL, CT 06067-3910  
 EMERGENCY PHONE: (860) 571-5100

ISSUED 8/31/98  
 17:07:15  
 FAX: (860) 571-5465

MATERIAL SAFETY DATA SHEET

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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Anti-Seize Lubricant 133AR  
 Item No.: 81343  
 Part No.: 133AR  
 Product Type: Lubricant

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	None
ALUMINUM	10 mg/m3 dust	5 mg/m3 resp	None
GAS OIL	5mg/m3 TWA mist	15 mg/m3 dust	None
ALUMINUM OXIDE	10 mg/m3 (AI)	5 mg/m3 respir.	None
COPPER	1 mg/m3 dust	15 mg/m3 dust	None
Hydrotreated heavy naphtha	5mg/m3 TWA mist	5 mg/m3 respir.	None
SILICA, QUARTZ	0.1mg/m3 TWA respirable dust	5mg/m3 TWA mist 0.1mg/m3 TWA respirable dust	400 ppm 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. Ingestion, inhalation, skin and eye contact.

Primary Routes of Entry:  
 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.

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Product Name: Anti-Seize Lubricant 133AR  
 Item No.: 81343

3. 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	IRR LUN	NO	NO	NO
GAS OIL	No Data	NO	NO	NO
ALUMINUM OXIDE	AC4 IRR NUI	NO	NO	NO
COPPER	BLO CNS GAS IMM IRR KID LIV MUT SEN SKI	NO	NO	NO
Hydrotreated heavy naphtha	No Data	NO	NO	NO
Lithium soap	No Data	NO	NO	NO
SILICA, QUARTZ	LUN	YES	2A	NO

Abbreviations

2A Probably carcinogenic to humans	AC4 AC01H-Unclassifiable as human carc.
BLO Blood	CNS Central nervous system
GAS Gastrointestinal	IMM Immune system
IRR Irritant	KID Kidney
LIV Liver	LUN Lung
MUT Mutagen	NUI Nuisance dust
SEN Sensory	SKI Skin

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  
 1% Gas oil  
 (% by volume in air) Upper 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 Service 1-800-243-4874 for shelf life information)  
 Handling: Keep away from eyes. Avoid prolonged skin contact. Avoid prolonged breathing of vapors.

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Product Name: Anti-Seize Lubricant 133AR  
Item No.: 813438. 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.: 81343

16. 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.

Prepared By: Stephen Repetto  
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