



Revision Number: 005.0

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1. PRODUCT AND COMPANY IDENTIFICATION

Product name:	LOCTITE® COPPER-BASED ANTI-SEIZE t LUBRICANT	IDH number:	234196
Product type:	Lubricant	Item number:	51003
Restriction of Use:	None identified	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

DANGER: CONTENTS UNDER PRESSURE.
EXTREMELY FLAMMABLE AEROSOL.
CAUSES SKIN IRRITATION.
MAY CAUSE AN ALLERGIC SKIN REACTION.
CAUSES SERIOUS EYE IRRITATION.
MAY CAUSE DROWSINESS OR DIZZINESS.

HAZARD CLASS	HAZARD CATEGORY
FLAMMABLE AEROSOL.	1
SKIN IRRITATION	2
EYE IRRITATION	2A
SKIN SENSITIZATION	1
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE	3

PICTOGRAM(S)



Precautionary Statements

Prevention:	Keep away from heat, sparks, open flames, hot surfaces - no smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Avoid breathing mist or spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear eye and face protection. Wear protective gloves.
Response:	IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to remove. Continue rinsing. Call a poison control center or physician if you feel unwell. If skin irritation or rash occurs: Get medical attention. If eye irritation persists: Get medical attention. Take off contaminated clothing.
Storage:	Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
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*
n-Heptane	142-82-5	30 - 60
Copper	7440-50-8	5 - 10
Propane	74-98-6	5 - 10
Butane	106-97-8	5 - 10
Graphite	7782-42-5	5 - 10
Distillates (petroleum), solvent-refined heavy paraffinic	64741-88-4	5 - 10
Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	5 - 10
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	1 - 5
Petroleum distillates, hydrotreated, light naphthenic	64742-53-6	1 - 5
Methylcyclohexane	108-87-2	1 - 5
Octane	111-65-9	1 - 5
Calcium dihydroxide	1305-62-0	1 - 5
Quartz (SiO ₂)	14808-60-7	0.1 - 1

* Exact percentage is a 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. Keep individual calm. 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.
Special firefighting procedures:	Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear. Water spray may be ineffective. Water should be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat. If water is used, fog nozzles are preferable.

Unusual fire or explosion hazards:

Contents under pressure. Do not handle or store near an open flame, heat or other sources of ignition. Do not puncture or incinerate pressurized containers. Exposure to temperatures above 49°C (120°F) may cause container to burst.

Hazardous combustion products:

Oxides of carbon.

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). Store in a closed container until ready for disposal.

7. HANDLING AND STORAGE

Handling:

Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Keep away from heat, spark and flame. Vapors will accumulate readily and may ignite explosively. Refer to Section 8.

Storage:

Keep in a cool, well ventilated area. Store away from ignition sources. Do not puncture, incinerate, or expose to temperatures above 48.9 °C (120 °F). Heat from sunlight, radiators, stoves, hot water, and other heat sources could cause container to burst.

For information on product shelf life contact Henkel Customer Service at (800) 243-4874.

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
n-Heptane	400 ppm TWA 500 ppm STEL	500 ppm (2,000 mg/m ³) PEL	None	None
Copper	1 mg/m ³ TWA (as Cu) Dust and mist. 0.2 mg/m ³ TWA (as Cu) Fume.	1 mg/m ³ PEL (as Cu) Dust and mist. 0.1 mg/m ³ PEL (as Cu) Fume.	None	None
Propane	Included in the regulation but with no data values. See regulation for further details	1,000 ppm (1,800 mg/m ³) PEL	None	None
Butane	1,000 ppm STEL	None	None	None
Graphite	2 mg/m ³ TWA Respirable fraction.	5 mg/m ³ PEL Respirable fraction. 15 mg/m ³ PEL Total dust. 15 MPPCF TWA	None	None
Distillates (petroleum), solvent-refined heavy paraffinic	5 mg/m ³ TWA Inhalable fraction. 5 mg/m ³ TWA mist 10 mg/m ³ STEL mist	500 ppm (2,000 mg/m ³) PEL 5 mg/m ³ PEL Mist. 5 mg/m ³ TWA mist	None	None
Distillates (petroleum), solvent-dewaxed heavy paraffinic	None	500 ppm (2,000 mg/m ³) PEL 5 mg/m ³ PEL Mist.	None	None
Distillates (petroleum), hydrotreated heavy naphthenic	5 mg/m ³ TWA mist 10 mg/m ³ STEL mist	5 mg/m ³ TWA mist 500 ppm (2,000 mg/m ³) PEL 5 mg/m ³ PEL Mist.	None	None
Petroleum distillates, hydrotreated, light naphthenic	None	500 ppm (2,000 mg/m ³) PEL 5 mg/m ³ PEL Mist.	None	None
Methylcyclohexane	400 ppm TWA	500 ppm (2,000 mg/m ³) PEL	None	None
Octane	300 ppm TWA	500 ppm (2,350 mg/m ³) PEL	None	None
Calcium dihydroxide	5 mg/m ³ TWA	5 mg/m ³ PEL Respirable fraction. 15 mg/m ³ PEL Total dust.	None	None
Quartz (SiO ₂)	0.025 mg/m ³ TWA Respirable fraction.	2.4 MPPCF TWA Respirable. 0.1 mg/m ³ TWA Respirable. 0.3 mg/m ³ TWA Total dust.	None	None

Engineering controls:

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

Respiratory protection:

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH. Observe OSHA regulations for respirator use (29 CFR 1910.134).

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. Neoprene or oil resistant gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Aerosol
Color:	Copper
Odor:	Solvent
Odor threshold:	Not available.
pH:	Not available.
Vapor pressure:	Not available.
Boiling point/range:	Not available.
Melting point/ range:	Not available.
Specific gravity:	Not available.
Vapor density:	Not available.
Flash point:	< -18 °C (< 0.4 °F) ; Values referring to propellant
Flashback:	Not evaluated.
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:	65 %; 650 g/l
Viscosity:	Not available.
Decomposition temperature:	Not available.

10. STABILITY AND REACTIVITY

Stability:	Stable under recommended storage conditions.
Hazardous reactions:	Will not occur.
Hazardous decomposition products:	Oxides of carbon.
Incompatible materials:	Strong oxidizing agents.
Reactivity:	Not available.
Conditions to avoid:	Do not puncture, incinerate, or expose to temperatures above 48.9 °C (120 °F). Keep away from heat, ignition sources and incompatible materials.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure:	Skin, Inhalation, Eyes
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Potential Health Effects/Symptoms

Inhalation:

May cause respiratory tract irritation. Central nervous system depression, including dizziness, drowsiness, fatigue, nausea, headache, unconsciousness. Extreme overexposure may result in unconsciousness and possibly death. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. Inhalation of copper fumes may result in metal fume fever. Symptoms include metallic taste, discoloration of skin or hair. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Skin contact:

Causes skin irritation. May cause allergic skin reaction. Defatting.

Eye contact:

Causes serious eye irritation.

Ingestion:

Not expected under normal conditions of use.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
n-Heptane	Inhalation LC50 (RAT, 4 h) = 103 mg/l	Central nervous system, Irritant
Copper	None	Allergen, Blood, Central nervous system, Developmental, Gastrointestinal, Immune system, Irritant, Kidney, Liver, Mutagen, Sensory, Skin
Propane	Inhalation LC50 (RAT, 15 min) = > 1,442.847 mg/l Inhalation LC50 (RAT, 15 min) = > 1,464 mg/l	Cardiac, Central nervous system, Irritant
Butane	Inhalation LC50 (RAT, 4 h) = 658 mg/l	Cardiac, Central nervous system, Irritant
Graphite	None	Lung
Distillates (petroleum), solvent-refined heavy paraffinic	None	Irritant
Distillates (petroleum), solvent-dewaxed heavy paraffinic	None	Irritant
Distillates (petroleum), hydrotreated heavy naphthenic	None	Irritant
Petroleum distillates, hydrotreated, light naphthenic	None	Irritant
Methylcyclohexane	None	Central nervous system, Irritant, Kidney, Liver
Octane	Inhalation LC50 (RAT, 4 h) = 118 mg/l	Central nervous system, Irritant, Lung
Calcium dihydroxide	Oral LD50 (RAT) = 7,340 mg/kg	Irritant, Corrosive
Quartz (SiO2)	None	Immune system, Lung, Some evidence of carcinogenicity

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
n-Heptane	No	No	No
Copper	No	No	No
Propane	No	No	No
Butane	No	No	No
Graphite	No	No	No
Distillates (petroleum), solvent-refined heavy paraffinic	No	No	No
Distillates (petroleum), solvent-dewaxed heavy paraffinic	No	No	No
Distillates (petroleum), hydrotreated heavy naphthenic	No	No	No
Petroleum distillates, hydrotreated, light naphthenic	No	No	No
Methylcyclohexane	No	No	No
Octane	No	No	No
Calcium dihydroxide	No	No	No
Quartz (SiO2)	Known To Be Human Carcinogen.	Group 1	No

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Do not incinerate. Depressurize cans. Follow all local, state, federal and provincial regulations for disposal.

Hazardous waste number: D001: Ignitable.

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

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 (n-Heptane)
Hazard class or division: 2.1
Identification number: UN 1950
Packing group: None
Marine pollutant: n-Heptane

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: 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). Copper (CAS# 7440-50-8).
CERCLA Reportable quantity: n-Heptane (CAS# 142-82-5) 100 lbs. (45.4 kg)
Propane (CAS# 74-98-6) 100 lbs. (45.4 kg)
Butane (CAS# 106-97-8) 100 lbs. (45.4 kg)
Methylcyclohexane (CAS# 108-87-2) 100 lbs. (45.4 kg)
Octane (CAS# 111-65-9) 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/NDL 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: New Safety Data Sheet format.

Prepared by: Catherine Bimler, Regulatory Affairs Specialist

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