



Revision Number: 005.0

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1. PRODUCT AND COMPANY IDENTIFICATION

Product name:	LOCTITE LB 8065 COPPER ANTI-SEIZE STICK known as LOCTITE® ANTI-SEIZE STICK COP	IDH number:	504468
Product type:	Lubricant	Item number:	37616
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

WARNING: CAUSES SKIN IRRITATION.
MAY CAUSE AN ALLERGIC SKIN REACTION.
CAUSES SERIOUS EYE IRRITATION.

HAZARD CLASS	HAZARD CATEGORY
SKIN IRRITATION	2
EYE IRRITATION	2A
SKIN SENSITIZATION	1

PICTOGRAM(S)



Precautionary Statements

Prevention:	Avoid breathing dust or fumes. Wash thoroughly after handling. 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 IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to remove. Continue rinsing. If skin irritation or rash occurs: Get medical attention. If eye irritation persists: Get medical attention. Take off contaminated clothing.
Storage:	Not prescribed
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

IDH number: 504468

Product name: LOCTITE LB 8065 COPPER ANTI-SEIZE STICK known as LOCTITE® ANTI-SEIZE STICK COP

Hazardous Component(s)	CAS Number	Percentage*
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	30 - 60
Copper	7440-50-8	10 - 30
Graphite	7782-42-5	10 - 30
Petroleum distillates, hydrotreated, light naphthenic	64742-53-6	10 - 30
Quartz (SiO ₂)	14808-60-7	1 - 5

* 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. If symptoms develop and persist, get medical attention.
Skin contact:	Wash with soap and water. If symptoms develop and persist, get medical attention.
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. Get medical attention.
Symptoms:	See Section 11.

5. FIRE FIGHTING MEASURES

Extinguishing media:	Dry chemical. Carbon dioxide. foam
Special firefighting procedures:	None
Unusual fire or explosion hazards:	None
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:	No special environmental precautions required.
Clean-up methods:	Follow all local, state, federal and provincial regulations for disposal. Scrape up as much material as possible. Clean residue with soap and water.

7. HANDLING AND STORAGE

Handling:	Wash thoroughly after handling. Avoid contact with eyes, skin and clothing. Keep container closed.
Storage:	Keep in a cool, well ventilated area.

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
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
Copper	0.2 mg/m ³ TWA (as Cu) Fume. 1 mg/m ³ TWA (as Cu) Dust and mist.	1 mg/m ³ PEL (as Cu) Dust and mist. 0.1 mg/m ³ PEL (as Cu) Fume.	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
Petroleum distillates, hydrotreated, light naphthenic	None	500 ppm (2,000 mg/m ³) PEL 5 mg/m ³ PEL Mist.	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:

Use only with adequate ventilation. Local exhaust ventilation is recommended when general ventilation is not sufficient to control airborne contamination below occupational exposure limits.

Respiratory protection:

Use NIOSH approved respirator if there is potential to exceed exposure limit(s). 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.

Skin protection:

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Solid
Color:	Copper
Odor:	Mild, Petroleum
Odor threshold:	Not available.
pH:	Not applicable
Vapor pressure:	Not determined
Boiling point/range:	Not available.
Melting point/ range:	Not available.
Specific gravity:	1.18
Vapor density:	Not determined
Flash point:	Product is a solid. Burn Rate: Approx 14 mm/2 minutes
Flammable/Explosive limits - lower:	Not determined
Flammable/Explosive limits - upper:	Not determined
Autoignition temperature:	Not determined
Evaporation rate:	Not determined
Solubility in water:	Insoluble
Partition coefficient (n-octanol/water):	Not determined
VOC content:	0 %
Viscosity:	Not available.
Decomposition temperature:	Not available.

10. STABILITY AND REACTIVITY

Stability:	Stable at normal conditions.
Hazardous reactions:	Will not occur.
Hazardous decomposition products:	Oxides of carbon.
Incompatible materials:	Oxidizing agents.
Reactivity:	Not available.
Conditions to avoid:	None known

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Eyes, Skin

Potential Health Effects/Symptoms

Inhalation:	Inhalation of copper fumes may result in metal fume fever. Symptoms include metallic taste, discoloration of skin or hair. This product has low volatility and is not expected to cause respiratory tract irritation during normal conditions of use. May cause respiratory tract irritation.
Skin contact:	Causes skin irritation. May cause allergic skin reaction.
Eye contact:	Causes serious eye irritation.
Ingestion:	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Principal hazard of ingestion is aspiration into the lungs and subsequent pneumonitis.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Distillates (petroleum), hydrotreated heavy naphthenic	None	Irritant
Copper	None	Allergen, Blood, Central nervous system, Developmental, Gastrointestinal, Immune system, Irritant, Kidney, Liver, Mutagen, Sensory, Skin
Graphite	None	Lung
Petroleum distillates, hydrotreated, light naphthenic	None	Irritant
Quartz (SiO ₂)	None	Immune system, Lung, Some evidence of carcinogenicity

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Distillates (petroleum), hydrotreated heavy naphthenic	No	No	No
Copper	No	No	No
Graphite	No	No	No
Petroleum distillates, hydrotreated, light naphthenic	No	No	No
Quartz (SiO ₂)	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: Follow all local, state, federal and provincial regulations for disposal.
Hazardous waste number: Not a RCRA hazardous waste.

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: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None

International Air Transportation (ICAO/IATA)

Proper shipping name: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None

Water Transportation (IMO/IMDG)

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Copper)
Hazard class or division: 9
Identification number: UN 3077
Packing group: III
Marine pollutant: Copper

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
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).
California Proposition 65: This product contains a chemical known in the State of California to cause cancer.

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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LOCTITE[®] LB 8065[™]

Known as LOCTITE[®] 8065[™] or LOCTITE[®] C5-A[®] Copper Grade Anti-Seize Stick
May 2015

PRODUCT DESCRIPTION

LOCTITE[®] LB 8065[™] provides the following product characteristics:

Technology	Anti-Seize
Chemical Type	Naphthenic oil
Appearance	Copper color ^{LMS}
Appearance (form)	Stick
Cure	Non-curing
Application	Lubrication

LOCTITE[®] LB 8065[™] provides a shield against high temperature seizing and galling. All mated parts, studs, bolts, flanges and gaskets, remove more easily and in cleaner and better condition. This product can be used on copper, brass, cast iron, steel, all alloys including stainless steel, all plastics and all non-metallic gasketing materials. Typical applications include original equipment and maintenance, and equipment associated with petroleum chemicals, steel mills, power plants, marine and foundries. This product is typically used in applications up to 982 °C.

TYPICAL PROPERTIES

Specific Gravity @ 25 °C	1.18
Flash Point - See SDS	
Penetration, ISO 2137, 1/10 mm	20 to 80 ^{LMS}
Copper Corrosion, ISO 2160	Slight tarnish, 1a
Dimensional Stability @ 77°C	Pass

TYPICAL PERFORMANCE

An anti-seize lubricant used on a bolt helps to develop greater clamp load for the same torque compared to an unlubricated bolt. An additional benefit is greater uniformity in clamp load among a series of bolts. The relationship between torque and clamp load is expressed in the following equation:

$$T = K \times F \times D$$

T = Torque (N·m, lb.in, lb.ft)

K = Torque coefficient or nut factor, determine experimentally

F = Clamp load (N, lb.)

D = Nominal diameter of bolt (mm, in.)

Torque coefficient, k:

SAE grade 5, class2, phosphate coated steel nuts & bolts	0.16
SAE grade 5, class2, phosphate coated steel nuts & bolts, solvent cleaned, not lubricated	0.19

GENERAL INFORMATION

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a lubricant for chlorine or other strong oxidizing materials.

For safe handling information on this product, consult the Safety Data Sheet (SDS).

Directions for use:

1. For best performance the mating surface should be clean and free of grease.
2. **Note: When grinding or wire brushing, use a dust mask.** Dust from cleaning threads may contain metal compounds. Inhalation may cause lung injury or other harm.
3. Apply thin coating to threads and flats of nuts and bolts, assemble.

Loctite Material Specification^{LMS}

LMS dated November 13, 2002. Test reports for each batch are available for the indicated properties. LMS test reports include selected QC test parameters considered appropriate to specifications for customer use. Additionally, comprehensive controls are in place to assure product quality and consistency. Special customer specification requirements may be coordinated through Henkel Quality.

Storage

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

Optimal Storage: 8 °C to 21 °C. Storage below 8 °C or greater than 28 °C can adversely affect product properties.

Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel Corporation cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Technical Service Center or Customer Service Representative.

Conversions

(°C x 1.8) + 32 = °F
kV/mm x 25.4 = V/mil
mm / 25.4 = inches
µm / 25.4 = mil
N x 0.225 = lb
N/mm x 5.71 = lb/in
N/mm² x 145 = psi
MPa x 145 = psi
N·m x 8.851 = lb·in
N·m x 0.738 = lb·ft
N·mm x 0.142 = oz·in
mPa·s = cP

Note:

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

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Reference 1.4