



Revision Number: 005.0

Issue date: 07/31/2014

1. PRODUCT AND COMPANY IDENTIFICATION

Product name:	C5-A® Copper Based Anti-Seize Lubricant	IDH number:	234263
Product type:	Lubricant	Item number:	51147
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: CAUSES SKIN IRRITATION.
MAY CAUSE AN ALLERGIC SKIN REACTION.
CAUSES SERIOUS EYE DAMAGE.

HAZARD CLASS	HAZARD CATEGORY
SKIN IRRITATION	2
SERIOUS EYE DAMAGE	1
SKIN SENSITIZATION	1

PICTOGRAM(S)



Precautionary Statements

Prevention:	Avoid breathing vapors, mist, or spray. 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. Immediately call a poison control center or physician. If skin irritation or rash occurs: 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

Hazardous Component(s)	CAS Number	Percentage*
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	30 - 60
Calcium dihydroxide	1305-62-0	10 - 30
Mineral oil light naphthenic hydrotreat. <3% DMSO	64742-53-6	10 - 30
Copper	7440-50-8	10 - 30
Graphite	7782-42-5	5 - 10
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 breathing is difficult, give oxygen. If not breathing, give artificial respiration. 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. Get medical attention.
Symptoms:	See Section 11.

5. FIRE FIGHTING MEASURES

Extinguishing media:	Carbon dioxide. Dry chemical. foam Water spray or fog.
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:	Do not allow material to contaminate ground water system.
Clean-up methods:	Scrape up as much material as possible. Clean residue with soap and water.

7. HANDLING AND STORAGE

Handling:	Use only with adequate ventilation. Avoid contact with eyes, skin and clothing. Keep container closed. Wash thoroughly after handling.
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/m3 TWA mist 10 mg/m3 STEL mist	5 mg/m3 TWA mist 500 ppm (2,000 mg/m3) PEL 5 mg/m3 PEL Mist.	None	None
Calcium dihydroxide	5 mg/m3 TWA	5 mg/m3 PEL Respirable fraction. 15 mg/m3 PEL Total dust.	None	None
Mineral oil light naphthenic hydrotreat. <3% DMSO	None	500 ppm (2,000 mg/m3) PEL 5 mg/m3 PEL Mist.	None	None
Copper	1 mg/m3 TWA (as Cu) Dust and mist. 0.2 mg/m3 TWA (as Cu) Fume.	1 mg/m3 PEL (as Cu) Dust and mist. 0.1 mg/m3 PEL (as Cu) Fume.	None	None
Graphite	2 mg/m3 TWA Respirable fraction.	5 mg/m3 PEL Respirable fraction. 15 mg/m3 PEL Total dust. 15 MPPCF TWA	None	None
Quartz (SiO ₂)	0.025 mg/m3 TWA Respirable fraction.	2.4 MPPCF TWA Respirable. 0.1 mg/m3 TWA Respirable. 0.3 mg/m3 TWA Total dust.	None	None

Engineering controls:

Use local ventilation if general ventilation is insufficient to maintain vapor concentration below established 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. Use of Butyl or Nitrile Rubber gloves is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Paste
Color:	Copper
Odor:	Mild
Odor threshold:	Not available.
pH:	Not applicable
Vapor pressure:	< 5.0 mm hg
Boiling point/range:	> 260 °C (> 500 °F)
Melting point/ range:	Not available.
Specific gravity:	1.30
Vapor density:	Heavier than air.
Flash point:	> 93 °C (> 199.4 °F)
Flammable/Explosive limits - lower:	Not determined
Flammable/Explosive limits - upper:	Not determined
Autoignition temperature:	Not determined
Evaporation rate:	Slower than ether.
Solubility in water:	Insoluble
Partition coefficient (n-octanol/water):	Not determined
VOC content:	< 3 % Essentially Zero

Viscosity: Not available.
Decomposition temperature: Not available.

10. STABILITY AND REACTIVITY

Stability: Stable at normal conditions.

Hazardous reactions: Will not occur.

Hazardous decomposition products: Hydrocarbons. Oxides of carbon.

Incompatible materials: Strong acids and strong bases. Oxidizing agents.

Reactivity: Not available.

Conditions to avoid: Prolonged exposure to heat.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes

Potential Health Effects/Symptoms

Inhalation: Inhalation of copper fumes may result in metal fume fever. Symptoms include metallic taste, discoloration of skin or hair.

Skin contact: Causes skin irritation. May cause allergic skin reaction.

Eye contact: Causes serious eye damage.

Ingestion: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Distillates (petroleum), hydrotreated heavy naphthenic	None	Irritant
Calcium dihydroxide	Oral LD50 (RAT) = 7,340 mg/kg	Irritant, Corrosive
Mineral oil light naphthenic hydrotreat. <3% DMSO	None	Irritant
Copper	None	Allergen, Blood, Central nervous system, Developmental, Gastrointestinal, Immune system, Irritant, Kidney, Liver, Mutagen, Sensory, Skin
Graphite	None	Lung
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
Calcium dihydroxide	No	No	No
Mineral oil light naphthenic hydrotreat. <3% DMSO	No	No	No
Copper	No	No	No
Graphite	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: RQ, Environmentally hazardous substances, liquid, n.o.s. (Copper)
Hazard class or division: 9
Identification number: UN 3082
Packing group: III
Marine pollutant: Copper
DOT Hazardous Substance(s): Copper

International Air Transportation (ICAO/IATA)

Proper shipping name: Environmentally hazardous substance, liquid, n.o.s.
Hazard class or division: 9
Identification number: UN 3082
Packing group: III

Water Transportation (IMO/IMDG)

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Copper)
Hazard class or division: 9
Identification number: UN 3082
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, 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: Copper (CAS# 7440-50-8) 5,000 lbs. (2,270 kg)
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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DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation and its affiliates ("Henkel") does not assume responsibility for any results obtained by persons over whose methods Henkel has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Henkel's products. In light of the foregoing, Henkel specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel's products. Henkel further disclaims any liability for consequential or incidental damages of any kind, including lost profits.



Henkel Corporation

Groves Industrial Supply
7301 Pinemont Dr
HOUSTON, TX 77040-6607
United States

Date: 08/15/2014

Dear Valued Customer:

Enclosed please find a new or revised Safety Data Sheet(s) (SDSs). You are receiving this/these in accordance with country/regional regulatory requirements.

<u>Item Number</u>	<u>IDH Number</u>	<u>Product Description</u>
51147	234263	C5-A® Copper Based Anti-Seize Lubricant

Previous versions of these documents should be replaced by the newer version.

SDSs should be forwarded to personnel responsible for workplace safety and to employees who will be handling this/these product(s) to ensure awareness and understanding of safety concerns and regulatory responsibilities. SDSs must also be forwarded on to your customers if you further distribute or resell the product.

If you have any questions, please contact your local Product Safety and Regulatory Affairs Specialist.

Sincerely,

Henkel Product Safety and Regulatory Affairs

NOTE: Henkel Corporation is in the process of revising and authoring Safety Data Sheets (SDSs) to comply with regulatory changes in accordance to the Globally Harmonized System of Classification and Labeling of Chemicals (GHS). As such, you may notice changes to our SDSs (formerly known as MSDSs). The format of the SDS has been modified to include, for example, GHS Hazard Classification, Hazard Category, Precautionary Text and Pictograms. Changes to overall hazard warnings may also occur as a result. Please review these changes as they are received. Product labels may also change as a result and will be closely aligned, where possible, to the release of the GHS SDS.

Changes will continue until the implementation deadline of June 1, 2015. For further information, please visit www.henkelna.com/GHS.

