



Revision Number: 002.0

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**1. PRODUCT AND COMPANY IDENTIFICATION**

**Product name:** LOCTITE C 511 60EN 3C 1.63MM UA  
known as 60/40C511 3C 1.63MM AF  
2.5KG AM

**Product type:** Solder Wire

**Restriction of Use:** None identified

**Company address:**  
Henkel Corporation  
One Henkel Way  
Rocky Hill, Connecticut 06067

**IDH number:** 1042100

**Item number:** MM02360

**Region:** United States

**Contact information:**  
Telephone: +1 (860) 571-5100  
MEDICAL EMERGENCY Phone: Poison Control Center  
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 AND EYE IRRITATION.  
MAY CAUSE DROWSINESS OR DIZZINESS.  
SUSPECTED OF CAUSING CANCER.  
MAY DAMAGE FERTILITY OR THE UNBORN CHILD.  
CAUSES DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE.

HAZARD CLASS	HAZARD CATEGORY
SKIN IRRITATION	2
EYE IRRITATION	2B
CARCINOGENICITY	2
REPRODUCTIVE TOXICITY	1B
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE	3
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	1

**PICTOGRAM(S)**



**Precautionary Statements**

**Prevention:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust or fumes. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves. Use personal protective equipment as required.

**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. IF exposed or concerned: Get medical attention. If skin irritation 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.

**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*
Tin	7440-31-5	30 - 60
Lead	7439-92-1	30 - 60

\* Exact percentage is a trade secret. Concentration range is provided to assist users in providing appropriate protections.

### 4. FIRST AID MEASURES

<b>Inhalation:</b>	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If symptoms develop and persist, get medical attention.
<b>Skin contact:</b>	Remove contaminated clothing and footwear. Immediately flush skin with plenty of water (using soap, if available). If a person feels unwell or symptoms of skin irritation appear, consult a physician. Wash clothing before reuse.
<b>Eye contact:</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists, consult a specialist.
<b>Ingestion:</b>	DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If symptoms develop and persist, get medical attention.
<b>Symptoms:</b>	See Section 11.

### 5. FIRE FIGHTING MEASURES

<b>Extinguishing media:</b>	Water spray (fog), foam, dry chemical or carbon dioxide.
<b>Special firefighting procedures:</b>	Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear. In case of fire, keep containers cool with water spray.
<b>Unusual fire or explosion hazards:</b>	May liberate large quantities of dense, foul-smelling smoke which may contain unidentified toxic gasses.
<b>Hazardous combustion products:</b>	Oxides of carbon. Oxides of Metals in Section 2. The flux medium will give rise to irritating fumes. Formaldehyde.

### 6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

<b>Environmental precautions:</b>	Do not allow product to enter sewer or waterways.
<b>Clean-up methods:</b>	Ensure adequate ventilation. Wear suitable protective clothing, gloves and eye/face protection. Scrape up spilled material and place in a closed container for disposal.

## 7. HANDLING AND STORAGE

**Handling:** Provide adequate ventilation. Wear suitable protective clothing, gloves and eye/face protection. Avoid contact with eyes, skin and clothing. Do not wear contact lenses. Wash thoroughly after handling.

**Storage:** Store in original container until ready to use.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

## 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
Tin	2 mg/m3 TWA	2 mg/m3 PEL (as Sn)	None	None
Lead	0.05 mg/m3 TWA (as Pb)	0.05 mg/m3 TWA 0.03 mg/m3 OSHA_ACT	None	None

**Engineering controls:** Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

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

**Eye/face protection:** Safety goggles or safety glasses with side shields.

**Skin protection:** Use impermeable gloves and protective clothing as necessary to prevent skin contact.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Solid
<b>Color:</b>	Gray
<b>Odor:</b>	Mild
<b>Odor threshold:</b>	Not available.
<b>pH:</b>	Not applicable
<b>Vapor pressure:</b>	Not determined
<b>Boiling point/range:</b>	Flux chars above 250°C (485°F)
<b>Melting point/ range:</b>	217 °C (422.6 °F) (solder alloy)
<b>Specific gravity:</b>	3.80
<b>Vapor density:</b>	Heavier than air.
<b>Flash point:</b>	Does not flash.
<b>Flammable/Explosive limits - lower:</b>	Not available.
<b>Flammable/Explosive limits - upper:</b>	Not available.
<b>Autoignition temperature:</b>	Not applicable
<b>Evaporation rate:</b>	Not available.
<b>Solubility in water:</b>	Negligible
<b>Partition coefficient (n-octanol/water):</b>	Not determined
<b>VOC content:</b>	0 %; 0 g/l
<b>Viscosity:</b>	Not available.
<b>Decomposition temperature:</b>	Not available.

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable under normal conditions of storage and use.
<b>Hazardous reactions:</b>	Will not occur.
<b>Hazardous decomposition products:</b>	Oxides of carbon. Oxides of Metals in Section 2. Thermal decomposition can lead to release of irritating gases and vapors. Formaldehyde.
<b>Incompatible materials:</b>	Strong oxidizing agents. Strong acids and strong bases.
<b>Reactivity:</b>	Not available.
<b>Conditions to avoid:</b>	Solder alloy will react with concentrated nitric acid to produce toxic fumes of nitrogen oxides.

## 11. TOXICOLOGICAL INFORMATION

**Relevant routes of exposure:** Skin, Inhalation, Eyes

**Potential Health Effects/Symptoms**

<b>Inhalation:</b>	Inhalation of processing fumes may be harmful. Vapor overexposure may cause drowsiness. Dizziness. Fumes and/or dust produced by this product may be hazardous in case of ingestion or inhalation. Rosin thermal decomposition product (as formaldehyde) is classified by NIOSH as a potential occupational carcinogen. Excessive exposure to tin fumes or dust may cause Stannosis, a chronic respiratory disease resulting in reduced lung capacity and benign tumors. Lead is a cumulative poison and continuous exposure to small amounts over time can raise the body's content to toxic levels. Excessive inhalation of fumes from many metals can produce an acute reaction known as "metal fume fever". Symptoms consist of chills and fever (very similar to and easily confused with flu symptoms) which come on a few hours after large exposures.
<b>Skin contact:</b>	Causes skin irritation.
<b>Eye contact:</b>	Causes eye irritation.
<b>Ingestion:</b>	Lead is a cumulative poison and continuous exposure to small amounts over time can raise the body's content to toxic levels.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Tin	None	Gastrointestinal, Irritant, Kidney, Liver, Lung, Nervous System
Lead	None	Behavioral, Blood, Developmental, Eyes, Gastrointestinal, Kidney, Liver, Muscle, Nervous System, Reproductive, Skin, Some evidence of carcinogenicity, Thyroid

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Tin	No	No	No
Lead	Reasonably Anticipated to be a Human Carcinogen.	Group 2B	No

## 12. ECOLOGICAL INFORMATION

**Ecological information:** Do not empty into drains / surface water / ground water.

## 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:** D008: Lead

## 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, solid, n.o.s.  
**Hazard class or division:** 9  
**Identification number:** UN 3077  
**Packing group:** III  
**DOT Hazardous Substance(s):** Lead

### International Air Transportation (ICAO/IATA)

**Proper shipping name:** Environmentally hazardous substance, solid, n.o.s.  
**Hazard class or division:** 9  
**Identification number:** UN 3077  
**Packing group:** III

### Water Transportation (IMO/IMDG)

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

## 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). Lead (CAS# 7439-92-1).  
**CERCLA Reportable quantity:** Lead (CAS# 7439-92-1) 10 lbs. (4.54 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/NDSL Status:** Contains one or more components listed on the Non-Domestic Substances List. All other components are listed on or are exempt from listing on the Domestic Substances List. Components listed on the NDSL must be tracked by all Canadian Importers of Record as required by Environment Canada. They may be imported into Canada in limited quantities. Please contact Regulatory Affairs for additional details.

## 16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: New Safety Data Sheet format.

**Prepared by:** Michele Oltra, Regulatory Affairs Specialist

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