



Revision Number: 003.0

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1. PRODUCT AND COMPANY IDENTIFICATION

Product name:	LOCTITE C 502 SN62 5C 1.02MM S known as SN62 C502 5C 1.02MM 0.5KG AM (IDH number:	421562
Product type/use:	Solder Wire	Item number:	MM01036
Restriction of Use:	None identified	Region:	United States
Company address:	Henkel Corporation One Henkel Way Rocky Hill, Connecticut 06067	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: HARMFUL IF SWALLOWED OR IF INHALED.
MAY CAUSE DROWSINESS OR DIZZINESS.
MAY DAMAGE FERTILITY OR THE UNBORN CHILD.
CAUSES DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE.

HAZARD CLASS	HAZARD CATEGORY
ACUTE TOXICITY ORAL	4
ACUTE TOXICITY INHALATION	4
REPRODUCTIVE TOXICITY	1A
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 affected area 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, clothing, eye and face protection.
Response:	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF exposed or concerned: Get medical attention.
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	60 - 80
Lead	7439-92-1	30 - 60
Silver	7440-22-4	1 - 5

* Exact percentages may vary or are 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. Get medical attention.
Skin contact:	Remove contaminated clothing and footwear. Immediately flush skin with plenty of water (using soap, if available). If symptoms develop and persist, get medical attention. Wash clothing before reuse.
Eye contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
Ingestion:	Do not induce vomiting. Never give anything by mouth to an unconscious person. If symptoms develop and persist, 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. Do not use water on fires where molten metal is present.
Unusual fire or explosion hazards:	None
Hazardous combustion products:	Oxides of carbon. Metal oxide fumes. The flux medium will give rise to irritating fumes. High temperatures may produce heavy metal dust, fumes or vapors.

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. Wear suitable protective clothing, gloves and eye/face protection. Scrape up spilled material and place in a closed container for disposal. Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up.

7. HANDLING AND STORAGE

- Handling:** Use only with adequate ventilation. Wear suitable protective clothing, gloves and eye/face protection. Avoid contact with eyes, skin and clothing. Avoid skin contact with molten resins. When using, do not eat, drink or smoke. Wash thoroughly after handling.
- Storage:** Store in original container until ready to use. Keep in a cool, well ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready for 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/m ³ TWA Inhalable fraction.	2 mg/m ³ PEL (as Sn)	None	None
Lead	0.05 mg/m ³ TWA (as Pb)	0.05 mg/m ³ TWA 0.03 mg/m ³ OSHA_ACT	None	None
Silver	0.1 mg/m ³ TWA Dust and fume.	0.01 mg/m ³ PEL (as Ag)	None	None

- Engineering controls:** Use only with adequate ventilation. 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 chemical resistant, impermeable clothing including gloves and either an apron or body suit to prevent skin contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

- | | |
|---|--|
| Physical state: | Solid, Paste |
| Color: | Metallic, Gray |
| Odor: | Sweet |
| Odor threshold: | Not available. |
| pH: | Not applicable |
| Vapor pressure: | Negligible vapor pressure at ambient temperatures. |
| Boiling point/range: | Not determined |
| Melting point/ range: | 179 °C (354.2 °F) (solder alloy) |
| Specific gravity: | 4.86 |
| Vapor density: | Not applicable |
| Flash point: | Does not flash. |
| Flammable/Explosive limits - lower: | Not applicable |
| Flammable/Explosive limits - upper: | Not applicable |
| Autoignition temperature: | Not applicable |
| Flammability: | Not applicable |
| Evaporation rate: | Not available. |
| Solubility in water: | Not miscible |
| Partition coefficient (n-octanol/water): | Not determined |
| VOC content: | 0 %; 0 g/l |
| Viscosity: | Not available. |
| Decomposition temperature: | Not available. |

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions of storage and use.
Hazardous reactions:	Will not occur.
Hazardous decomposition products:	Oxides of carbon. Metal oxide fumes. Thermal decomposition can lead to release of irritating gases and vapors.
Incompatible materials:	Strong oxidizing agents. Strong acids and strong bases.
Reactivity:	Not available.
Conditions to avoid:	High temperatures. 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, Ingestion

Potential Health Effects/Symptoms

Inhalation:	Harmful if inhaled. 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. Lead is a cumulative poison and continuous exposure to small amounts over time can raise the body's content to toxic levels. Excessive exposure to tin fumes or dust may cause Stannosis, a chronic respiratory disease resulting in reduced lung capacity and benign tumors. Vapor overexposure may cause drowsiness. Dizziness. 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.
Skin contact:	May cause skin irritation. Argyria (a non-toxic, cosmetic blue-gray discoloration of the skin and mucous membranes that is irreversible).
Eye contact:	May cause eye irritation.
Ingestion:	Harmful if swallowed. Lead is a cumulative poison and continuous exposure to small amounts over time can raise the body's content to toxic levels. Symptoms of lead poisoning include abdominal pain, nausea, vomiting, and headache.

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
Silver	Oral LD50 (Rat) = > 5,000 mg/kg Dermal LD50 (Rat) = > 2,000 mg/kg	Allergen, Eyes, Irritant, Respiratory, Skin

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
Silver	No	No	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. Do not dispose of in an uncontrolled manner.

Hazardous waste number: D008: Lead D011. Silver.

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

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed as active or are exempt from listing on the Toxic Substances Control Act (TSCA) inventory.

TSCA 12 (b) Export Notification: Lead (CAS# 7439-92-1).

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). Silver (CAS# 7440-22-4).

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: Product Safety and Regulatory Affairs

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