



Revision Number: 004.0

Issue date: 07/19/2018

1. PRODUCT AND COMPANY IDENTIFICATION

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|----------------------------|--|-----------------------------|---|
| Product name: | LOCTITE C 511 96SC 5C 0.81MM H known as 96SC C511 5C 0.81MM 0.5KG (0.0) | IDH number: | 692857 |
| Product type: | Solder Wire | Item number: | MM01902 |
| 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

NOT CLASSIFIED. READ ENTIRE SAFETY DATA SHEET.

| HAZARD CLASS | HAZARD CATEGORY |
|--------------|-----------------|
| None | None |

PICTOGRAM(S)

None

Precautionary Statements

| | |
|--------------------|----------------|
| Prevention: | Not prescribed |
| Response: | Not prescribed |
| Storage: | Not prescribed |
| Disposal: | Not prescribed |

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 | 90 - 100 |
| 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

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| 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: | 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: | Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention. |
| Ingestion: | 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. |
| Symptoms: | See Section 11. |

5. FIRE FIGHTING MEASURES

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| 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. Oxides of Metals in Section 3. Hydrocarbons. Formaldehyde. High temperatures may produce heavy metal dust, fumes or vapors. The flux medium will give rise to irritating fumes. |

6. ACCIDENTAL RELEASE MEASURES

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

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| 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

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| Handling: | Use only with adequate ventilation. Always be careful around molten material. 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: | For safe storage, store between 15 °C (59°F) and 30 °C (86°F) 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 |
| Silver | 0.1 mg/m3 TWA Dust and fume. | 0.01 mg/m3 PEL (as Ag) | None | None |

| | |
|--------------------------------|--|
| Engineering controls: | Use adequate ventilation to remove molten vapors or fumes. 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

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|---|--|
| Physical state: | Solid |
| Color: | Gray, Metallic |
| Odor: | None |
| Odor threshold: | Not available. |
| pH: | Not available. |
| Vapor pressure: | Negligible vapor pressure at ambient temperatures. |
| Boiling point/range: | Not available. |
| Melting point/ range: | 217 °C (422.6 °F) (solder alloy) |
| Specific gravity: | 7.5 |
| Vapor density: | Not available. |
| Flash point: | Product is a solid. |
| Flammable/Explosive limits - lower: | Not available. |
| Flammable/Explosive limits - upper: | Not available. |
| Autoignition temperature: | Not available. |
| Flammability: | Not applicable |
| Evaporation rate: | Not available. |
| Solubility in water: | Insoluble |
| Partition coefficient (n-octanol/water): | Not available. |
| VOC content: | < 5 % |
| Viscosity: | Not available. |
| Decomposition temperature: | Not available. |

10. STABILITY AND REACTIVITY

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| Stability: | Stable under normal conditions of storage and use. |
| Hazardous reactions: | Will not occur. |
| Hazardous decomposition products: | Oxides of carbon. Oxides of Metals in Section 3. Formaldehyde. 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

Potential Health Effects/Symptoms

Inhalation: Inhalation of processing fumes may be harmful. Excessive exposure to tin fumes or dust may cause Stannosis, a chronic respiratory disease resulting in reduced lung capacity and benign tumors. 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: Not expected under normal conditions of use.

| Hazardous Component(s) | LD50s and LC50s | Immediate and Delayed Health Effects |
|------------------------|--|---|
| Tin | None | Gastrointestinal, Irritant, Kidney, Liver, Lung, Nervous System |
| 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 |
| 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: 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 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). Silver (CAS# 7440-22-4).
California Proposition 65: No California Proposition 65 listed chemicals are known to be present.

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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