



Chemical Name: SN62 Solder

Manufacturer: Multicore

Container size: 1 lb.

Location: VLA

Disposal: Place empty container in trash.



Revision Number: 001.1

Issue date: 01/05/2012

1. PRODUCT AND COMPANY IDENTIFICATION

Product name:	SN62 C502 5C 0.61MM 0.5KG AM (0.024)	IDH number:	403673
Product type:	Solder Wire	Item number:	MM01034
Company address:	Henkel Electronic Materials LLC 14000 Jamboree Road Irvine, CA 92606	Region:	United States
		Contact information:	Telephone: 1.888.9.HENKEL (1.888.943.6535) 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

Physical state:	Paste	HEALTH:	*3
Color:	Metallic, grey	FLAMMABILITY:	1
Odor:	Sweet	PHYSICAL HAZARD:	0
		Personal Protection:	See MSDS Section 8
DANGER:	MAY CAUSE EYE AND RESPIRATORY TRACT IRRITATION. HARMFUL IF SWALLOWED, ABSORBED THROUGH SKIN OR INHALED. POSSIBLE CANCER HAZARD.		

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

Potential Health Effects

Inhalation: Lead is a cumulative poison and continuous exposure to small amounts over time can raise the body's content to toxic levels. Fumes may be irritating and may cause an allergic respiratory reaction. 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: Harmful if absorbed through skin. Prolonged or repeated skin contact may cause irritation, skin sensitization and argyria (a non-toxic, cosmetic blue-gray discoloration of the skin and mucous membranes that is irreversible).

Eye contact: Contact with eyes will cause irritation.

Ingestion: 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. May cause gastrointestinal tract irritation if swallowed.

Existing conditions aggravated by exposure: Repeated or prolonged exposure to lead and its compounds may produce general health deterioration by an accumulation in one or more human organs.

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous components	CAS NUMBER	%
Tin	7440-31-5	60 - 100
Lead	7439-92-1	30 - 60
Silver	7440-22-4	1 - 5

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:	Wash with soap and water. Remove contaminated clothing and footwear. Wash clothing before reuse. Get medical attention.
Eye contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
Ingestion:	Induce vomiting as directed by medical personnel if person is conscious. Get immediate medical attention.

5. FIRE FIGHTING MEASURES

Flash point:	Does not flash.
Autoignition temperature:	Not applicable
Flammable/Explosive limits - lower:	Not applicable
Flammable/Explosive limits - upper:	Not applicable
Extinguishing media:	Foam, dry chemical or carbon dioxide.
Special firefighting procedures:	Wear a self-contained breathing apparatus with a full face piece operated in pressure-demand or other positive pressure mode. Do not use water on fires where molten metal is present. High temperatures may produce heavy metal fumes, dust and vapor.
Unusual fire or explosion hazards:	May liberate large quantities of dense, foul-smelling smoke which may contain unidentified toxic gasses.
Hazardous combustion products:	High temperatures may produce heavy metal dust, fumes or vapors. The flux medium will give rise to irritating fumes. Oxides of carbon. Oxides of Metals in Section 2. Thermal oxidation may result in the formation of formaldehyde. Formaldehyde is a potential cancer hazard and a known skin and respiratory sensitizer. Vapors irritate the eyes, nose and throat.

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:	Sweep up spilled material. Avoid creating dust. Dispose of according to Federal, State and local governmental regulations.

7. HANDLING AND STORAGE

Handling:	Avoid skin contact with molten resins. Do not wear contact lenses. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.
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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 components	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Tin	2 mg/m ³ TWA	2 mg/m ³ TWA (as Sn)	None	None
Lead	0.05 mg/m ³ TWA (as Pb)	29 CFR 1910.1025 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 TWA (as Ag)	None	None

Engineering controls:	Use only with adequate ventilation. Use local ventilation if general ventilation is insufficient to maintain vapor concentration below established exposure limits.
Respiratory protection:	When workplace hazards warrant the use of a respirator, appropriate respirators must be used, and a program that follows 29 CFR 1910.134 must be followed.
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

Physical state:	Paste
Color:	Metallic, grey
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
Evaporation rate:	Not available.
Solubility in water:	Not miscible
Partition coefficient (n-octanol/water):	Not determined
VOC content:	Not available.

10. STABILITY AND REACTIVITY

Stability:	Stable under recommended storage conditions.
Hazardous reactions:	Will not occur.
Hazardous decomposition products:	Thermal decomposition can lead to release of irritating gases and vapors.
Incompatible materials:	Oxidizing agents.
Conditions to avoid:	High temperatures.

11. TOXICOLOGICAL INFORMATION

Hazardous components	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

Hazardous components	Health Effects/Target Organs
Tin	Gastrointestinal, Irritant, Kidney, Liver, Lung, Nervous System
Lead	Behavioral, Blood, Developmental, Eyes, Gastrointestinal, Kidney, Liver, Muscle, Nervous System, Reproductive, Skin, Some evidence of carcinogenicity, Thyroid
Silver	Allergen, Eyes, Irritant, Respiratory, Skin

12. ECOLOGICAL INFORMATION

Ecological information:

No specific studies have been conducted by Henkel on the ecotoxicity or environmental fate of this material; however, commonly available data on the material indicate that uncontrolled releases to soil, ground water, or surface waters could entail acute and/or chronic ecological effects, depending on the quantity and concentration of such releases. Releases of volatile components to the atmosphere are not believed to entail significant ecological consequences provided such releases are within the exposure levels set forth in this document. Accordingly, all appropriate measures should be taken to avoid uncontrolled releases to the environment, and any spills or other uncontrolled releases which may occur should be contained and cleaned up immediately in accordance with Section 6.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal:

Do not dispose of in an uncontrolled manner. Follow all local, state, federal and provincial regulations for disposal.

Hazardous waste number:

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Lead. Silver

14. TRANSPORT INFORMATION

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 minimus
CERCLA/SARA Section 302 EHS:	None above reporting de minimus
CERCLA/SARA Section 311/312:	Immediate Health, Delayed Health
CERCLA/SARA 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).
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.
WHMIS hazard class:	D.2.B, D.2.A

16. OTHER INFORMATION

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

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