



SAFETY DATA SHEET (SDS)

Lead Solder Alloy Sn45

Date: 1/1/2015

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Lead Solder Alloy Sn45 (Sn45Pb54Ag1)

MANUFACTURER: Amerway Inc.

ADDRESS: 3701 Beale Ave.
Altoona, PA 16601

PHONE: 814-944-0200

FAX PHONE: 814-944-1463

PRODUCT USE: Solder
PREPARED BY: Terry Buck

CHEMTREC: 800-424-9300
CHEMTREC (Outside US & Canada): 703-527-3887

SECTION 1 NOTES:

SECTION 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

ROUTES OF ENTRY:

EYES: Dust or fumes will be irritant.

SKIN: Not a route of entry into the body.

INGESTION: Harmful if swallowed.

INHALATION: If breathing is difficult, move victim to fresh air.

NFPA RATINGS (scale 0-4)

Health= 2

Fire= 0

Reactivity= 0

HMIS RATINGS (scale 0-4)

Health= 2

Fire= 0

Reactivity= 0

SECTION 2 NOTES: May cause damage to organs through prolonged or repeated exposure.
Suspected of damaging fertility or the unborn child.
May cause long lasting harmful effects to aquatic life.



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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT: Tin/Lead/Silver

<u>CAS NO.</u>	<u>% WT</u>	<u>% VOL</u>	<u>SARA 313 REPORTABLE</u>
7440-31-5 Tin (Sn)	43-47		Yes
7439-92-1 Lead (Pb)	52-56		Yes
7440-22-4 Silver (Ag)	0.5-2		

ACGIH TLV-TWA: Lead 0.5mg/cu m ACGIH
0.05mg/cu m OSHA (PEL)

Tin 2mg/cu ACGIH
2mg/cu m (inorganic) OSHA
0/1mg/cu m (organic) OSHA

Silver 0.1mg/cu ACGIH/OSHA

SECTION 3 NOTES: Composition and percent of solder alloys varies widely and can be determined by product label.
This product does not contain any Substance of Very High Concern (SVHC) on the European Chemicals Agency (ECHA) candidate list.

SECTION 4: FIRST AID MEASURES

EYES: Rinse opened eye for several minutes under running water.

SKIN: Immediately wash with soap and water and rinse thoroughly.

INGESTION: Seek immediate medical advice.

INHALATION: Supply fresh air, seek medical attention.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:

SECTION 4 NOTES:

SECTION 5: FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA: Suitable extinguishing agents – CO₂, sand, extinguishing powder. Do not use water.

SPECIAL FIRE FIGHTING PROCEDURES: If metal is present where there is fire, wear self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS: In case of fire the following can be released:

Carbon monoxide (CO)
Nitrogen oxides (NO_x)
Carbon dioxide (CO₂)

HAZARDOUS DECOMPOSITION PRODUCTS: Lead fumes at high temperatures (above 800 degrees F.)

SECTION 5 NOTES:



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SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES:

Ensure adequate ventilation

Do not allow to enter sewers/surface or ground water.

Allow to solidify and collect in sealed containers for disposal.

Use caution to avoid breathing fumes if a gas torch is used to cut up large pieces.

SECTION 6 NOTES:

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE:

Store in dry conditions.

OTHER PRECAUTIONS:

Lead use is regulated under OSHA 29CFR 1910.1025. No food or drink should be allowed in areas where these products are handled. Personnel must wash thoroughly after handling the metal before drinking, eating or smoking.

SECTION 7 NOTES:

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:

VENTILATION: If fume or dust is being generated, mechanical ventilation must be provided to maintain exposure level below TLV,s

RESPIRATORY PROTECTION: Respiratory protection is recommended but only if TLV's are exceeded. Use a NIOSH/MSHA approved respirator for toxic dust and/or fume. *Note: See 29CFR1910.1025 subpart (f) of OSHA's Lead Standard.*

EYE PROTECTION: Wear safety glasses during soldering operations.

SKIN PROTECTION: Skin protection is not normally needed but wash hands thoroughly.

CONTROL PARAMETERS:

7439-92-1 LEAD (Pb)

PEL - Long term value: 0.05* mg/m³

*see 29CFR 1910.1025

REL - Long term value: 0.05* mg/m³

*8-hr TWA, excl. lead arsenate; See PocketGuideApp.C

TLV - Long term value: 0.05* mg/m³

*and inorganic compounds, as Pb; BEI

7440-31-5 TIN (Sn)

PEL – Long term value: 2 mg/m³

REL – Long term value: 2 mg/m³

TLV – long term value: 2 mg/m³



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7440-22-4 Silver (Ag)

PEL - Long term value: 0.01 mg/m3
metal and soluble compounds (as Ag)

REL - Long term value: 0.01 mg/m3

TLV - Long term value: 0.01 mg/m3
metal: dust and fume

SECTION 8 NOTES:

PEL= Permissible Exposure Limit (OSHA)

TLV= Threshold Limit Value (ACGIH)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Silver grey.

ODOR: Odorless

PHYSICAL STATE: Solid

pH VALUE: Not applicable

MELTING POINT/MELTING RANGE: 350-410°F

VAPOR PRESSURE (mmHg): Not applicable

DENSITY): 11.36 Approx.

VAPOR DENSITY: Not applicable

WATER SOLUBILITY: Insoluble

SECTION 9 NOTES:

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID (STABILITY): Not applicable

INCOMPATIBILITY (MATERIAL TO AVOID): Strong acids, oxidizers, reducing agents.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: No decomposition if used according to specifications.

HAZARDOUS POLYMERIZATION: Will not occur

SECTION 10 NOTES:



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SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:

Skin Contact: No irritant effect.

Eye: Dust or fume will be irritant.

Ingestion: Ingestion of dust or fume must be avoided. Lead is toxic and cumulative, affecting the kidneys, reproductive system and nervous system. Symptoms of chronic overexposure include anemia, insomnia, weakness, irritability, constipation and stomach pains. Tin is not regarded as toxic but excessive exposure can cause fever, nausea, stomach cramps or diarrhea. This product when used for welding and similar applications, produces chemicals known to cause cancer and birth defects (or reproductive harm). (California Health & Safety Code 25249.5 et seq).

Inhalation: Inhalation of dust and fumes must be avoided. Irritation of nose and bronchial tracts may occur as well as effects due to absorption of lead, etc. in blood stream.

SECTION 11 NOTES:

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION:

Aquatic toxicity: No further relevant information available.

*Note: Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.*

SECTION 12 NOTES:

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Must not be disposed of together with household garbage. Do not allow to reach sewage system. Disposal must be made according to official regulations. If proper disposal methods are not available, return product to supplier for reprocessing.

SECTION 13 NOTES:

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION

PROPER SHIPPING NAME: Not regulated
HAZARD CLASS: Not regulated
ID NUMBER: Not regulated
PACKING GROUP: Not regulated
LABEL STATEMENT: Not regulated

WATER TRANSPORTATION

PROPER SHIPPING NAME: Not regulated
HAZARD CLASS: Not regulated
ID NUMBER: Not regulated
PACKING GROUP: Not regulated
LABEL STATEMENTS: Not regulated



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AIR TRANSPORTATION

PROPER SHIPPING NAME: Not regulated
HAZARD CLASS: Not regulated
ID NUMBER: Not regulated
PACKING GROUP: Not regulated
LABEL STATEMENTS: Not regulated

OTHER AGENCIES:

SECTION 14 NOTES:

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TSCA (TOXIC SUBSTANCE CONTROL ACT): All components listed for the subject finished product are on the TSCA Inventory of Chemical Substances and are not subject to any chemical specific regulation under TSAC Section 12(b) export notification requirements delineated at 40 CFR part 707, subpart D.

All ingredients are listed or exempt from listing.

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):

313 REPORTABLE INGREDIENTS: 7439-92-1 LEAD (Pb)

STATE REGULATIONS: California Proposition 65/Chemicals known to cause cancer. LEAD (Pb)

Warning: This product contains a chemical(s) known to the State of California to cause Cancer.

California Proposition 65/Chemicals known to cause reproductive toxicity, LEAD (Pb)

Warning: This product contains a chemical(s) known to the State of California to cause birth defects and/or other reproductive harm.

INTERNATIONAL REGULATIONS:

SECTION 15 NOTES:

SECTION 16: OTHER INFORMATION

OTHER INFORMATION: This information is given in good faith, no warranty, express or implied is made. Amerway Inc. makes no representations and assumes no responsibility as to the accuracy, completeness or suitability of this data for any purchasers use. The data on this Safety Data Sheet relates only to this product and does not relate to use with any other material or in any process. All chemical products should be used only by, or under the direction of, technically qualified personnel who are aware of the hazards involved and the necessity for reasonable care in handling. Hazard communication regulations require that employees must be trained on how to use a Safety Data Sheet as a source for hazard information.

PREPARATION INFORMATION:

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