

# Safety Data Sheet

## According to 1907-2006/EC, Article 31

Version: 1.0

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Trade Name:** Lead Sheet.

**Details of the supplier of the safety data sheet.**

This Safety Data Sheet has been updated in accordance with the Globally Harmonized System (GHS).

**Manufacturer Name:** Canfield Technologies/BOW Electronic Solders  
**Address:** 1 Crossman Road, Sayreville, NJ 08872  
**General Phone Number:** 732-316-2100  
**INFOTRAC** 24 Hour Emergency Telephone Number: 1-800-535-5053  
**SDS Creation Date** 6-Jan-15  
**SDS Revision Date:** 6-Jan-15

### 2. HAZARDS IDENTIFICATION

**Classification of the substance or mixture: Carcinogen 1B - H350**

**Classification according to Regulation (EC) NO 1272/2008**



GHS08 Health Hazard

Resp.Sens. 1B **H350** May cause cancer.



GHS07

Acute Tox. 4 **H302** Harmful if swallowed.

**Label elements**

**Labeling according to Regulation (EC) No 1272/2008**

The product is classified and labeled according to the CLP regulation.

Hazard pictograms



GHS08 GHS07

Signal word Danger

Hazard-determining components of labeling:

**Lead (Pb)**

**Hazard Statements**

**H302** Harmful if swallowed .

**H350** May cause cancer.

**Precautionary statements**

**P201** Obtain special instructions before use.  
**P202** Do not handle until safety precautions have been read and understood.  
**P260** Do not breathe dust/fume/gas/vapors/spray.  
**P264** Wash skin thoroughly after handling.  
**P273** Avoid release to the environment  
**P280** Wear eye protection , protective clothing, protective gloves.  
**P308+P313** If exposed or concerned: Get medical advice/ attention.  
**P405** Store locked up.  
**P501** Dispose of contents/container in according with local/regional/national regulations.  
**Other Hazards:** Prevent particles from becoming airborne. Can cause thermal burns when molten.

**Unknown Acute Toxicity Statement:**

Not Applicable.

**Classification system:****NFPA ratings (scale 0-4 )**

Health = 1  
Fire = 0  
Reactivity = 0



Health = 1  
Fire = 0  
Reactivity = 0

**Other hazards****Results of PBT and vPvB assessment**

PBT : Not applicable

vPvB: Not applicable

**3. COMPOSITION OF MIXTURE**
**Chemical characterization: Mixtures**

**Description:** Mixtures of the substances listed below with nonhazardous additions.

CAS No.	Description	% Range
CAS: 7439-92-1	Lead	Repr. 1A, H350 >99%
EINECS: 231-100-4		Acute Tox. 4, H302

**Additional information:**

This solder product does not contain any Substance of very High Concern (SVHC) on the European Chemicals Agency (ECHA) candidate list.

Composition and weight percent of solder alloys varies widely and can be determined by product label.

**4. FIRST AID MEASURES**
**Description of first aid measures****After inhalation:**

In case of unconsciousness place patient stably in side position for transportation.

Supply fresh air, consult doctor in case of complaints.

**After skin contact:** Immediately wash with water and soap and rinse thoroughly.

**After eye contact:** Rinse opened eye for several minutes under running water.

**After swallowing:**

Induce vomiting, if person is conscious. Seek medical help.

Seek immediate medical advice.

**Information for doctor:**

Most important symptoms and effects, both acute and delayed. No further relevant information available.

Indication of any immediate medical attention and special treatment needed. No further relevant information available.

**5. FIREFIGHTER MEASURES**
**Extinguishing media**

**Suitable extinguishing agents:** CO<sub>2</sub>, Do not use water.

**For safety reasons unsuitable extinguishing agents:** water

**Special hazards arising from the substance or mixture**

In case of fire, the following can be released:

Carbon monoxide (CO)

Carbon dioxide (CO<sub>2</sub>)

Melted solder above 1000°F will liberate toxic lead fumes and aiphatic aldehydes

**Advice for fire fighters**

**Protective equipment:** Wear self-contained respiratory protective device.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures** Ensure adequate ventilation

**Environmental precautions:** Do not allow to enter sewers/surface or ground water.

**Methods and material for containment and cleaning up:**

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Melted solder will solidify on cooling and can scraped up. Use caution to avoid breathing fumes if a gas torch is used to cut up large pieces.

**Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## 7. HANDLING AND STORAGE

**Handling:**

**Precautions for safe handling:** Prevent formation of dust.

**Information about protection against explosions and fires:** No special measures required.

**Conditions for safe storage, including any incompatibilities**

**Storage:**

Requirements to be met by storerooms and receptacles: Store in a cool location.

Information about storage in one common storage facility: Not required.

Further information about storage conditions:

Keep receptacle tightly sealed.

Store in dry conditions.

Exposure to sulfur or to high humidity will tarnish solder surface.

**Specific end use (s)** No further relevant information available.

## 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

**Additional information about design of technical systems:** No further data; see item 7.

**Control parameters**

**Components with limit values that require monitoring at the workplace:**

**Lead 7493-92-1**

**USA ACGH** ACGIH TWA ( mg/m<sup>3</sup>) 0.05 mg/m<sup>3</sup>

**USA NIOSH** NIOSH REL (TWA) ( mg/m<sup>3</sup>) 0.05 mg/m<sup>3</sup>

**USA IDLH** US IDLH ( mg/m<sup>3</sup>) 100 mg/m<sup>3</sup>

**USA OSHA** OSHA PEL (TWA) ( mg/m<sup>3</sup>) 50 µg/m<sup>3</sup>

**Additional information:**

**PEL** = Permissible Exposure Limit (OSHA)

**TWA** = Time-Weighted Average

**OSHA** = Occupational Safety and Health Administration.

**ACGIH** = American Conference of Governmental Industrial Hygienists

**Exposure controls**

**Personal protective equipment:**

General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

**Breathing equipment:**

**Exposure controls:** Use appropriate engineering control such as process enclosures, local exhaust ventilation to control airborne levels below recommended exposure limits.

When ventilation is not sufficient to remove airborne levels from the breathing zone, a NIOSH safety approved respirator or self-contained breathing apparatus should be worn. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.

**Protection of hands:**



**Protective gloves**

**Material of gloves:**

Nitrile rubber, NBR

Natural rubber, NR

**Penetration time of glove material:**

The exact break through time has to be found out by the manufacturer of the protective gloves and to be observed.

**Eye protection :****Face Shield or Safety Glasses****9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties****General Information****Appearance :**

<b>Form:</b>	Metal in sheet form.
<b>Color:</b>	grey, silver
<b>Odor:</b>	N/A
<b>pH-value:</b>	N/A
<b>Change in condition</b>	
<b>Melting point/melting range:</b>	327.43°C (621.4°F)
<b>boiling point/boiling range:</b>	1740 C (3164°F)
<b>Flammability (solid, gaseous):</b>	N/A
<b>Flash point :</b>	N/A
<b>Auto igniting:</b>	N/A
<b>Vapor density :</b>	N/A
<b>Molecular Weight :</b>	207.21 g/mol
<b>Viscosity:</b>	N/A
<b>Solubility:</b>	insoluble in water
<b>Specific Gravity (Relative Density) :</b>	11.3                    0                    0
<b>Evaporation Rate:</b>	N/A
<b>Vapor Pressure:</b>	1 mm Hg @ 973 C (1783 F)

**10. STABILITY AND REACTIVITY****Reactivity****Chemical stability**

Thermal decomposition/conditions to be avoided: No decomposition if used according to specifications.

**Possibility of hazardous reactions:** No dangerous reactions known**Conditions to avoid:** No further relevant information available.**Incompatible materials:** Strong acids, strong oxidizers.**Hazardous decompositions products:**

Carbon monoxide and carbon dioxide

When heated to soldering temperatures, the solvents are evaporated and rosin may be thermally degraded to liberate aliphatic aldehydes and acids.

**11. TOXICOLOGICAL INFORMATION****Information on toxicological effects****Routes of exposure**

Inhalation of dust, fumes.

**Skin:** Contact through physical contact.**Eye:** Contact through physical contact or dust and fumes.**Ingestion:** Through contamination of skin/ surfaces.**Chronic and Acute Related Symptoms / Effects:****Inhalation:** Dust or fumes can cause respiratory irritation.**Skin:** Contact with molten metal can cause burns.**Eye:** Dust or fumes can cause eye irritation.**Ingestion:** Can cause harmful effects.

Acute symptoms can include headaches, abdominal pain, memory loss, kidney failure, anemia, change in skin tone, reproductive problems, weakness, pain, or tingling.

Chronic exposure may cause cancer or lead poisoning.

**Measures of Toxicology:**

**Acute toxicity:** Not Classified.

**Skin corrosion/ Irritation:** Not Classified

**Serious Eye Damage/ Irritation:** Not Classified

**Respiratory or Skin Sensitization:** Not Classified

**Carcinogenic Information:**

**May cause Cancer.**

**IARC** (International Agency for Research on Cancer) Group: 2A

**Lead** 7439-92-1

**NTP** (National Toxicology Program) status: Reasonably anticipated to be human carcinogen.

**12. ECOLOGICAL INFORMATION****Toxicity**

**Aquatic toxicity:** No further relevant information available.

**Additional ecological information:****General notes:**

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.

**Result of PBT and vPvB assessment**

**PBT:** Not applicable.

**VPvB:** Not applicable.

**13. DISPOSAL CONSIDERATIONS****Waste treatment methods****Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Disposal must be made according to official regulations.

**Uncleaned packaging's**

**Recommendations:** Disposal must be made in accordance to official regulations.

**14. TRANSPORT INFORMATION**

<b>UN- NUMBER</b>	UN 3077
<b>UN proper shipping name</b>	Environmentally Hazardous Substance, solid, n.o.s. (Lead)
<b>IMDG, IATA</b>	
<b>Transport hazard class (es)</b>	
<b>DOT, ADR, IMDG, IATA</b>	Not regulated
<b>Class</b>	9
<b>Packing group</b>	III
<b>Environmental hazards:</b>	Do not release to waterways.
<b>Special precautions for user</b>	Wash skin after contact.
<b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.

**15. REGULATORY INFORMATION****Safety, Health and Environmental regulation / legislation specific for the substance or mixture**

**USA** The following information relates to product regulation specific to the USA.

**SARA** (Superfund Amendments and Reauthorization Act): Section 311/312 Hazard Classes-Delayed (chronic) Health Hazrad.

**SARA** (Specific toxic chemical listings): Section 313 Emissions Reporting - 0.1%.

**US State Regulations:**

California- Prop. 65- Carcinogens List.

California- Prop. 65- Development Toxicity.

California- Prop. 65- Reproductive Toxicity male/Female.

Massachusetts- Right To Know List.

Pennsylvania- Right To Know (Environmental Hazrad)

Pennsylvania- Right To Know.

New Jersey- Right To Know List.

### Workplace Hazardous Materials Identification (WHMIS):

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulation (CPR) and the Safety Data Sheet (SDS) contains all of the information required by the CPR.

### Labeling according to Regulation (EC) NO 1272/2008

The product has classified and labeled according to the CLP regulation.

Hazard pictograms



GHS07



GHS08

Signal word Danger

### Hazard-determining components of labeling:

Lead

**H302** Harmful if swallowed .

**H350** May cause cancer.

### Precautionary statements

**P201** Obtain special instructions before use.

**P202** Do not handle until safety precautions have been read and understood.

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**P501** Dispose of contents/container in according with local/regional/national regulations.

## 16. OTHER INFORMATION

The information contained herein is based on data considered accurate and is offered solely for information, consideration and investigation. Bow and Canfield Technologies extends no warranties, makes no representations and assumes no responsibility as to the accuracy, completeness or suitability of this data for any purchaser's use. The information 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 Material Safety Data Sheet as a source for hazard information.

**\*Data compared to the previous version altered.**