



Material Safety Data Sheet

Section 1 - Product Information

Product Name: **Solder Paste Type 615D/617D**

Manufacturer : Qualitek International, Inc. Emergency Telephone Number: 1-800-535-5053
315 Fairbank Street Information Telephone Number: 1-630-628-8083
Addison, IL 60101, USA Fax Number: 1-630-628-6543

Date Prepared: 01/15/99

Supercedes: 06/15/94

Section 2 – Ingredients / Identity

Hazardous

<u>Chemical Common Name(s)</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	<u>Wt. %</u>	<u>CAS #</u>
**Lead	0.05 mg/m ³	0.15 mg/m ³	*	7439-92-1
Tin	2.00 mg/m ³	2.00 mg/m ³	*	7440-31-5
**Silver	0.01 mg/m ³	0.10 mg/m ³	*	7440-22-4
**Antimony	0.5 mg/m ³	0.5 mg/m ³	*	7440-36-0
Bismuth	N/E	N/E	*	7440-69-9
Modified Rosin	N/E	N/E	<6	65997-13-9
High Boiling Glycol Ether	N/E	N/E	<3	112-73-2

Hazard Rating Systems

HMIS: Health: 2 Flammability: 1 Reactivity: 0 Personal Protection: B
No other hazardous ingredients exceed 1%. Other ingredients are not considered hazardous according to 29 CFR 1910.1200

Section 3 – Physical and Chemical Characteristics

Boiling Point: 493° F (Vehicle) Specific Gravity (H₂O = 1): 3.5-5.5
Vapor Pressure (mm Hg):N/D Melting Point: (Of Alloy): Refer to Technical Bull.
Vapor Density (AIR²=1): N/D Reactivity in Water: None
Solubility in Water: Partial
Appearance and Odor: Metallic Gray Paste with Mild Odor

Section 4 - Fire and Explosion Data

Flash Point: >240°F Flammable Limits in Air % by Volume:
Auto Ignition Temperature: >440°F LEL Lower: N/E UEL Upper: N/E
Special Fire Fighting Procedures: SCBA with full-face piece and protective clothing is recommended, if this material is in the vicinity of fire.
Unusual Fire and Explosion Hazards: None Known

Section 5 - Reactivity Data

Stability: Stable Unstable Conditions to Avoid: None
Incompatibility (Materials to Avoid): Strong Acids, Strong Oxidizers
Hazardous Decomposition or By Products: May release toxic vapor/gases such as Carbon Monoxide, Carbon Dioxide
Hazardous Polymerization: May Occur Will not Occur Conditions to Avoid: N/A

*Composition and weight % of Solder Powder vary widely, and can be determined by product label. Solder powder is typically 85-90% of solder paste composition.

**Subject to reporting requirements of SARA TITLE III, Section 313 and 40 CFR Part 372.

Section 6 – Health Hazards

Acute (Severe Short Term) Health Hazards:

Inhalation of fumes or ingestion may cause headache, nausea, muscular pain, irritation of eye and nose may result from contact with soldering fumes.

Chronic (Long Term) Health Hazards:

Anemia, insomnia, weakness, constipation and abdominal pain due to ingestion, skin rash, damage to mucous membrane due to skin exposure and inhalation.

Signs and Symptoms of Exposure: Irritation of pulmonary system, skin rash

Medical Conditions Generally Aggravated by Exposure: Pre-existing conditions of the lungs, diseases of the blood and blood forming organs; kidneys, nerves and possibly reproductive systems.

Carcinogenicity: Not listed as a carcinogen by NTP, OSHA, ACGIH: IARC classifies lead and its compounds as a Group 2B carcinogen (possibly carcinogenic to humans).

Emergency and First Aid Procedures: Perform the following First Aid Procedures; consult a Physician and get proper medical attention when necessary, in case of contact with smoke from soldering or repeated skin contact.

Eye Contact: Flush eyes with plenty of water for 15 minutes.

Skin Contact: Wash thoroughly with soap and water; use lotion to prevent dryness. If molten solder comes in contact with skin cool with water.

Inhalation: Remove person to fresh air

Ingestion: Drink a lot of water, do not induce vomiting and get proper medical attention

Section 7 - Special Precautions and Spill/Leak Procedures

Handling and Storage: Do not store or use near spark or flame. Keep containers closed tightly and upright to prevent leakage.

If Material is Released or Spilled: Scoop up paste and deposit in appropriate containers. Clean up residual with Isopropanol or detergent water.

Waste Disposal Methods: Dispose in accordance with Federal, State and local regulations.

Other Precautions: Avoid repeated or prolonged breathing of vapor or skin contact; wash hands immediately, remove paste from under finger nails.

Section 8 – Special Protection Information / Control Measures

Respiratory Protection: Usually not required. When ventilation is not adequate to remove smoke (during soldering) from breathing zone a cartridge type respirator should be used.

Ventilation & Local Exhaust: As required keep PEL & TLV below the limit

Protective Gloves: Neoprene or rubber

Eye Protection: Splash guard goggles.

Other Protective Equipment: Not required.

Work / Hygienic Practices: Wash hands after handling product, avoid prolonged or repeated contact with skin or breathing fumes and vapors.

Section 9 – Other Regulatory Information

TSCA: Subject chemical substance(s) and ingredient(s) are all listed on the "TSCA Inventory" of chemical substances maintained by the U.S. Environmental Protection Agency.

SARA TITLE III: Section 311/312 – This product is classified into the following hazard categories:

Delayed Health. **Section 313** – The following toxic chemical is subject to the Community Right-To-Know reporting requirements: Lead, CAS#7439-92-1; Silver, CAS #7440-22-4; Antimony, CAS#7440-36-0. Weight percentages can be determined by product label.

California Proposition 65: This product contains lead, a chemical known to some states to cause cancer and birth defects or other reproductive harm.

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