MATERIAL SAFETY DATA SHEET

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: **No Clean Solder Paste**
Product Code: **8200-1320, 8200-1322 & 8200-1323**
Manufacturer: A. P. E. South
Address: 106240 Overseas Hwy
Key Largo, FL 33037, USA
Telephone: (305) 451-4722 (Mon-Fri, 9 am - 5 pm EST)
Fax: (305) 451-3374

CAS Registry Number : Not applicable since product is a mixture

SECTION 2: COMPOSITION, INFORMATION ON INGREDIENTS

Chemical Name	CAS #	Exposure Limits
Tin	7440-31-5	2 mg/M3 ACGIH (1)
Lead	6439-93-1	0.05 mg/M3 OSHA (1)(2)
Terpineol	8000-41-7	Not established
Armeen D	61788-95-2	Not established

TVL is very unlikely to be reached since material is in the paste form; hence no airborne particles. Provide adequate ventilation in the firing room to remove any evolved fumes.

(1). Supplementary data on lead attached if applicable.

(2). Per 29 CFR 1910 the mixture has not been tested as a whole. All hazardous components which comprise >= 1% of the mixture (0.1% if carcinogenic) are listed. Percentages of individual components are not listed as this information is considered a trade Secret; it is not required that it be disclosed.

SECTION 3: PHYSICAL DATA

Appearance:	Gray/Black
Physical State	Paste
Odor:	Mild
Specific gravity:	>1
Vapor pressure (Estimated for Mixture, 20°C)**:**	<1 mm Hg
Vapor density(Air = 1)**:**	>1
Evaporation rate (Estimated for mixture, n-butyl acetate = 1, 20°C)**:**	<1
Initial Boiling point (of Organic Mixture)**:**	417°F
Freezing/Melting point:	N.A.
Solubility in water:	Negligible
pH:	N.A.

SECTION 4: FIRE, REACTIVITY, AND EXPLOSION HAZARD DATA

Flash point (Most flammable solvents)**:** (190°F)

Auto ignition Temperature (Most Flammable Solvents)**:** N/AV

Flammable Limits in Air (Most Flammable Solvents)**:** N/AV

Extinguishing Media: Water Fog, Alcohol Foam, and Dry Chemical

Special Fire Fighting Procedure: Cool exposed containers with water. When fighting use NIOSH approved self-contained breathing apparatus with full face piece operated in positive pressure mode, as evolved fumes are toxic and cause respiratory irritation.

Unusual Fire and Explosion Hazards: Store below flash point and away from open flames or sparks.

Stability: The material is stable.

Incompatibility: Will not react with water. Avoid mixing with strong oxidizing agents, acids, and caustics.

Hazardous Decomposition Product: Combustion produces Carbon Monoxide, Carbon Dioxide, and various hydrocarbons.

Hazardous Polymerization: Will not occur.

SECTION 5: HEALTH HAZARDS OF COMPONENTS

OSHA PERMISSIBLE EXPOSURE LIMIT: Not Established For Mixture

COMPONENT LISTED AS CARCINOGENIC BY NTP, IARC, OR OSHA: None

POTENTIAL HEALTH EFFECTS

TARGET ORGANS: Skin, Eyes, Respiratory System, And Gastrointestinal System.

PRIMARY ROUTES OF ENTRY:

ORGANIC COMPONENTS: Inhalation, Skin Absorption

INORGANIC COMPONENTS: Ingestion

ROUTE EXPOSURE	ACUTE & CHRONIC SYSTEM	MEDICAL CONDITIONS AGGRAVATED.	EMERGENCY FIRST AID
Inhalation	Irritant	Unknown	Remove to fresh air. If breathing difficult give oxygen. If breathing has stopped, start artificial respiration.
Skin Contact	Irritant	Unknown	Remove contaminated clothes and launder before reuse. Wash thoroughly with soap and water.
Eye Contact	Moderate	Unknown	Flush with running water for 15 minutes lifting upper and lower lids.
Ingestion	Irritation of the GI System	Unknown	Drink large quantities of water.

- If necessary, copies of toxicology study provided to HICD by manufacturers of the above Hazardous components can be supplied. Synergistic or additive effects of the above chemicals are unknown, as are the effects of exposure of these chemicals in addition to others present in the workplace.

•• In all cases keep individuals warm, quiet, and get medical attention.

SECTION 6: PERSONAL PROTECTION AND CONTROLS

PERSONAL PROTECTION: Avoid prolonged skin contact.

RESPIRATORY: Not required if local exhaust is satisfactory. If overexposure occurs, use NIOSH-OSHA approved air supply respirator suitable for organic vapors. Administrative or engineering controls should be implemented to reduce exposure.

EYE: Chemical splash goggles or OSHA approved glasses.

SKIN: Solvent resistant gloves.

ENGINEERING CONTROLS: Recommend ventilation provides sufficient mechanical (general or local exhaust) ventilation to maintain concentration below TLV.

HYGIENIC PRCATICES: Prevent eye contact with glasses or goggles, minimize skin contact, use with adequate ventilation to minimize inhalation of vapors. Do not smoke or eat in work areas. Wash hands thoroughly prior to smoking or eating.

SECTION 7: STORAGE, SPILL AND DISPOSAL

SPECIAL STORAGE CONDITIONS: Keep containers closed and sealed when not in use.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Clean spill with disposable paper towels (wear rubber gloves) and wash area with soap and water.

WASTE DISPOSAL METHOD: Dispose in accordance with all local, state, and federal regulations.

EPA WASTE CLASS: N/AV

SECTION 8 : TRANSPORTATION

DOT ID No:

SECTION 9 : REFERENCES

The MSDS is compilation of information supplied by the manufacturers of the chemicals present in this product. Also, 29 CFR. 1210 was consulted for TLV information. *** This information is for guidance and is furnished without warranty of any kind. It is a compilation of data believed to be reliable, but A.P.E. South, assumes no opbligation or liability for it's completeness or accuracy.

SECTION 10: GENERAL INFORMATION---A.P.E. BGA WETTING SOLUTION

Proper Shipping Name: None

DOT Hazard Name: None

DOT ID No.: None

DOT Hazard Class: None

DOT Spill Reporting Information: None

RCRA Class (If Discarded)**:** Toxic D008

EPA Priority Pollutant: None

NFPA:

- **Health:** 1
- **Flammability:** 1
- **Reactivity:** 0