

材料安全資料表

MSDS-0307

MATERIAL SAFETY DATA SHEET

第一段 物品與廠商資料/SECTION I PRODUCT AND COMPANY INFORMATION

廠商名稱：東莞市沛祥五金電子有限公司 Manufacturer：PS-TECH INC.	緊急聯繫電話： Urgent Tel：0769-87295885
廠商地址：廣東省東莞市清溪鎮九鄉管理區 ADDRESS：Jiu Xiang Industrial Area, Qing Xi Town, DongGuan City, Guangdong Province, China	緊急傳真： Urgent Fax：0769-87295887
品名/型號：無鉛錫膏 PS703AH5-1 Product/Model：Solder paste PS703AH5-1	規格： Spec：Sn96.5/Ag3.0/Cu0.5
MSDS NO.：MSDS-0307	發行日期：1/Mar/2006 Revised Date：

第二段 材料辯識含量/SECTION II INGREDIENTS / IDENTITY

化學品名稱 Ingredients	WT. %	安全濃度 OSHA PEL	極限值 ACGIH TLV	CAS#
錫 / Tin, Sn	96.5+/-0.5 of alloy	2.00mg/m ³	2.00mg/m ³	7440-31-5
銀/Silver, Ag	3.0+/-0.3 of alloy	2.00mg/m ³	2.00mg/m ³	7440-22-4
銅 / Copper, Cu	0.5+/-0.1 of alloy	2.00mg/m ³	2.00mg/m ³	7440-50-8
松香、樹脂 / Rosin	< 5.0	Not Established	Not Established	65997-05-9
聚乙二醇 / Polyglycol Ether	< 3.0	Not Established	Not Established	9038-95-3
羧基酸 / Carboxylic Acid	< 2.0	Not Established	Not Established	68937-72-4
氫化萘諾酮 Hydrocarbons	< 1.0	Not Established	Not Established	68475-70-7

危險等級 (Hazard Rating Systems)

HMIS：健康/Health：2 ; 可燃性/Flammability：1
活躍性/Reactivity：0 ; 自身保護/Personal protection：B

第三段 物理化學特性/SECTION III PHYSICAL AND CHEMICAL CHARACTERISTICS.

物理狀態：灰色膏狀物 Appearance：Gray Cream	沸點：不適用 Boiling Point：Not applicable
氣味：溫和氣味 Odor：Mild Odor	合金熔點：217°C Alloy Melting Point：
pH：不適用 / Not applicable.	合金比重：7.4(H ₂ O=1) Alloy Specific Gravity：
蒸汽壓：不適用 Vapor Pressure：Not applicable	蒸汽密度：不適用 Vapor Density：Not applicable(air=1)
揮發速率：不適用 Evaporation Rate：Not applicable [Butyl Acetate=1]	水中溶解度：不溶 Solubility in Water：Insoluble

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第四段 災害處理資料/SECTION IV FIRE AND EXPLOSION HAZARD DATA

閃點：不確定 Flash Point : Not established	自燃點：不確定 Auto-ignition Temperature : Not established
空氣中爆炸極限：不適用 Flammable Limits : Not applicable	
適用滅火器：二氧化碳、乾粉或泡沫滅火器 Extinguishing Media : Carbon Dioxide, Dry Chemical or Foam	
特種火情滅火程式：建議滅火人員穿著防火衣和配戴自帶呼吸器的全面保護面罩 Special Fire Fighting Procedures : Firefighters should wear full protective clothing and self- contained breathing apparatus operated in positive pressure mode.	

第五段 化學反應特性/SECTION V REACTIVITY DATA

穩定性：穩定 Stability : Stable
應避免條件：避免高於 500°C 以上之高溫作業 Conditions to Avoid : Avoid temp. over 500°C
不相容性（須避免原材料）：避免接觸強酸、強氧化物 Incompatibility(Materials to Avoid) : Avoid contact with strong Acids, strong Oxidizers
產品分解物之危害性：受熱時可能會釋放出有毒蒸汽或氣體，如：一氧化碳，二氧化碳 Hazardous Decomposition / Byproducts : May release toxic vapor/gases such as Carbon Monoxide, Carbon Dioxide when heated.
有害之聚合物：不會有 Hazardous Polymerization : Will not occur

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第六段 健康危害資料/SECTION VI HEALTH HAZARDS DATA

進入人體之方法與途徑：1.呼吸進入 Routes of Entry：1.Inhalation	2.皮膚接觸 2.Skin	3.吞食 3.Ingestion
可能產生的健康危害： 急性健康危害：吸入或攝入煙氣，可以引起頭痛，噁心，肌肉痛等，接觸回流焊的煙氣會導致流鼻涕和流眼淚。 慢性健康危害：長期攝入並積累後，可以導致貧血、失眠、神經衰弱、便秘及腹部疼痛。皮膚暴露吸入會導致皮疹，損害皮膚粘膜。 Potential Health Effects： Acute Health Hazards：Inhalation of fumes or ingestion may cause headache, nausea and muscular pain. Irritation of eye and nose may result from contact with soldering fumes. Chronic Health Hazards：Anemia, insomnia, weakness, constipation and abdominal pain due to ingestion. Skin rash, damage of mucous membrane due to skin exposure and inhalation.		
致癌化學品清單：按 NTP，IARC 及 OSHA 標準，無 Carcinogenicity：Not listed by carcinogen by NTP, IARC, OSHA .		
出現症狀：表現為呼吸性過效，引發咳嗽或皮疹。 Sign and Symptoms of Exposure：Respiratory irritation and symptoms of asthma, Skin irritation and rash.		
內科症狀：肺部、血液疾病及循環系統問題；腎、神經及生殖系統問題 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.		
緊急情況的急救措施： 皮膚接觸：用肥皂和水沖洗乾淨； 眼睛接觸：立即用大量清水沖洗 15 分鐘以上，並送醫治 不慎吸入：將傷患抬至新鮮空氣流通的地方休息，若仍呼吸困難，則應立即送醫治； 不慎食入：用水漱口，喝大量的水，並送醫治。 Emergency and First Aid Procedures: Skin contact：Wash off with soap and water. Eye contact：Wash immediately with plenty of water for at least 15 minutes. Seek medical attention. Inhalation：Move affected person to fresh air and allow to rest. If respiratory distress persists, seek medical Attention. Ingestion：Wash out mouth with water, Give a lot of water to drink, and seek medical attention immediately.		

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第七段 預防措施/SECTION VII SPECIAL PROTECTION / CONTROL MEASURES

呼吸道防護措施：通常無要求 Respiratory Protection： Not generally required.
皮膚防護措施：使用橡膠手套 Skin Protection： Use neoprene gloves.
眼睛防護措施：戴安全護目鏡 Eye Protection： Wear safety goggles.
通風設備：於有適當通風的地方使用，設備需配備良好的抽風裝置 Ventilation： Use with adequate ventilation and local exhaust
其他防護措施：防護衣，洗眼器 Other Protection： Protective clothing, eye-wash fountain in work area.
工作衛生習慣：作業中不得飲食、抽煙等，作業後要洗手。避免長時間或多次皮膚接觸和吸入煙氣 Work/Hygienic Practices： Do not eat, drink or smoke in work areas, wash hands thoroughly after use. Avoid prolonged or repeated contact with skin or breathing fumes and vapors.

第八段 洩露及廢棄處理 / SECTION VIII SPILL/LEAK AND WASTE DISPOSAL PROCEDURES

洩露情況的處理：避免接觸皮膚，穿戴適當的保護衣物，將溢出物刮到適當的容器內，並蓋緊容器蓋。用 IPA 或清潔類溶劑清洗剩餘物 Spilled or Released Procedures： Avoid contact with skin. Wear suitable protective clothing. Scrape up spillage and transfer to a closed container. Clean up residual with Isopropanol or detergent water.
廢棄處置方法：刮回的合金成份通常仍有價值，可聯絡回收商，回收再用，或依照國際、國家或地方的相關法規處置 Waste Disposal Method： Scrap metal alloy usually has value, contact a commercial reclaimer for recycling .Otherwise, dispose in accordance with Federal, State and Local regulations.

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第九段 操作與儲存方法 / SECTION IX HANDLING AND STORAGE

安全操作：不使用時須將容器密封，使用時小心避免洩露。於專為錫膏設計的設備中使用。在使用或搬運錫膏時，需穿戴適當的保護裝置，避免接觸皮膚，避免吸入煙氣。用後洗手，在未徹底將手洗乾淨前不要用手接觸或擦眼睛。

Handling Precautions : Keep containers tightly closed when not use. Use care to avoid spills. Use only with production equipment specifically designed for use with solder paste. Wear appropriate personal protective equipment when working or handling solder paste. Avoid contact with skin. Avoid breathing fumes from the heated product. Always thoroughly wash your hands after handling this product. Do Not touch or rub eyes until hands are washed.

儲存：緊蓋容器頂蓋，存放於陰涼、乾燥、無明火、無強氧化物和強酸的地方。參考產品標籤上的標示設定儲存溫度。確保於標籤上標示的期限前使用，請勿存放于兒童可觸及之地點。

Storage Precautions : Store product in tightly capped original containers in a cool, dry area away from flame, strong oxidizing agents and concentrated Acid. Refer to product label for specific storage temperature requirements. Rotate stock to ensure use before expiration date on the label. Please keep out of reach of children.

第十段 生態學資料 / SECTION X ECOLOGICAL INFORMATION

目前尚未資料

This section is a subject to future development.

第十一段 運送資料 / SECTION XI TRANSPORT INFORMATION

本品不含有國際禁運的危險物質

This product is not classified as material hazardous for transport.