

物质安全资料表(MSDS)

MATERIAL SAFETY DATA SHEET

一、化学品名称和企业标识 Chemical name and company logo

化学制品名称 Chemical name: 激光锡膏 Laser Solder Paste

化学品型号 Chemical model:

FTD -209L(FTD-2094L、FTD-2095L) (dispensing process)

FTP-209L(FTP-2094L、FTP-2095L) (Printing process)

制造商名称: 深圳市福英达工业技术有限公司

电话: 86-0755-26690898

Manufacturer name: Shenzhen Fitech Co., Ltd.

Tel:86-0755-26690898

制造商地址: 深圳市宝安区松岗街道松岗东路 6 号 8 栋

传真: 86-0755-26820233

Manufacturer Add: 8 building.No.6, Songgang east Rd, baoan Shenzhen China,Fax:86-0755-26820233

二、材料成份和含量 Material composition and content

主要成份 component	中文名称 Name	含量 (%) Content	吸入容量许浓度 (TLV)	CAS No.
合金成份 Alloy 82~89%	锡 Tin	96.5±0.5	2	7440-31-5
	银 Silver	3.0±0.2	2	7440-22-4
	铜 Copper	0.5±0.2	2	7440-50-8
	X Dopants	1.0~2.0	2	-
助焊膏 Flux 11~18%	松香树脂 rosin resin	20-40	NE	65997-06-0
	活性剂 organic acid	6-15	NE	--
	触变剂 thixotropic	2-8	0.5	63428-84-2
	溶剂 solvent	30-50	5.0	55934-93-5

三、危害辨识资料 Hazards Identification

危险分类 hazard classification	危险类别 Class	图示标签
皮肤腐蚀/刺激 Skin corrosion/irritation	类别 2	
严重眼损伤/眼刺激 eye injury/eye irritation	类别 2A	
皮肤敏化作用 Skin sensitization	类别 1	

吸入危害 Aspiration hazard	类别 1	
侵入途径 Route of invasion	吸入、皮肤和眼睛接触。 Inhalation, skin and eye contact.	
健康危害 Health hazard	本品产生的烟雾对皮肤、眼睛和呼吸道粘膜有刺激作用。导致倦睡头疼,咽喉疼痛以及其它过敏反应。本品产生的烟雾可导致金属烟雾病,过量或反复地吸入本品的烟尘和烟雾可能导致锡肺尘症。 The smoke produced by this product has a stimulating effect on the skin, eyes and respiratory mucosa. Causes tired sleep headaches, sore throat and other allergic reactions. The fumes produced by this product can cause metal fumes, and excessive or repeated inhalation of fumes and fumes from this product may cause tin pneumoconiosis.	
环境危害 Environmental hazards	无资料 no data	
燃爆危险 Explosion hazard	非可燃或易燃品。 Non-combustible or flammable.	

四、健康急救措施 First Aid Measures

进入人体的方法和途径 Route of invasion	1、呼吸吸入 2、皮肤接触 3、吞入 1,Inhalation 2, skin contact 3, swallow
感染之预兆和症状 Signs and symptoms	呼吸不适或偶有头晕,部分可能红痒 Breathing discomfort or occasional dizziness, some may be red itching
急性健康危害后果 Acute hazard consequence	过量吸入会引起头晕、恶心和心律不整或引起轻微哮喘 Excessive inhalation can cause dizziness, nausea and arrhythmia or cause mild asthma
慢性健康危害后果 Chronic harm consequences	尚无正式医学报告 No formal medical report yet
紧急处理急救措施 Emergency treatment first aid measures	1、皮肤接触时,可用清水与肥皂清洗,如果症状持续,就医。 When skin is in contact, wash with water and soap. If symptoms persist, seek medical attention. 2、不慎触及眼睛,可用清水冲洗 15 分钟并立即送医治疗。 accidentally touch the eyes, rinse with water for 15 minutes and

	<p>immediately send medical treatment</p> <p>3、吸呼吸新鲜空气；如果症状持续，给予人工呼吸并就医。 breathe fresh air; if the symptoms persist, give artificial respiration and seek medical attention</p> <p>4、吞食时，可喝 1-2 杯清水或稀牛奶，并诱发呕吐和送医。 when swallowing, you can drink 1-2 cups of water or thin milk, and induce vomiting and medical treatment</p>
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五、消防措施 Fire Fighting Measures

危险特性 Dangerous characteristics	非可燃或易燃品。Non-flammable or flammable.
有害燃烧产物 Hazardous combustion products	氧化锡、氧化铋、二氧化碳、一氧化碳以及其他小分子碳氢化合物。Tin oxide, bismuth oxide, carbon dioxide, carbon monoxide, and other small carbon hydrogens
灭火剂 Extinguishing agent	干粉、泡沫，沙土 Dry powder, foam, sand
灭火注意事项 Fire fighting precautions	消防人员须佩戴防毒面具、穿全身消防服、在上风向灭。 Firefighters must wear gas masks, wear full-body fire suits, and put them on the wind.

六、泄露及废弃处理 Leakage processing method

泄漏之紧急应变 Emergency response	<p>用酒精或异丙醇擦洗，迅速撤离泄露污染区人员至安全区，并进行隔离，严格限制出入，尽可能切断泄露源，防止进入下水道、排洪沟等限制性空间。大量泄露：构筑围堤或挖坑收容；用沙土覆盖，降低蒸汽灾害。用防爆泵转移至槽车或专用收集器内，回收或运至废物处理场所处置。Scrub with alcohol or isopropyl alcohol, quickly evacuate people from the contaminated area to a safe area, and isolate them, strictly restrict access, cut off leak sources as much as possible, and prevent restricted spaces such as sewers and flood drains. A large number of leaks: building dikes or digging pits;</p>
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	covering with sand to reduce steam disasters. Transfer to a tank truck or special collector with an explosion-proof pump, recycle or transport to a waste disposal site for disposal
废弃处理 Disposal	少量泄露：用砂土或其它不燃材料吸附或吸收。应按当地的规定处理。Small leakage: adsorption or absorption with sand or other noncombustible materials. Local regulations shall be followed.

七、操作处置和储存 Handling and storage

操作注意事项 Operational	工作场所应保持有良好的通风和排烟环境。作业时，避免吸入烟尘或烟雾、避免与皮肤和眼睛接触。个人防护措施参照第八部分。 The workplace should be well ventilated and smoke exhaust environment. Avoid inhaling fumes or fumes and avoid contact with skin and eyes during work. Personal protection measures refer to the eighth part
储存注意事项 Storage	勿与食品、饲料及药品混放。储存于阴凉干燥库房，勿于乙炔、氯、或过氧化氢同室存放。保持容器罐紧闭。Do not mix with food, feed and medicine. Store in a cool dry warehouse, do not store in the same room as acetylene, chlorine, or hydrogen peroxide. Keep the container tightly close.

八、暴露预防措施 Exposure preventions

个人防护设备 Personal safety equipment	口 应佩戴防护口罩 Mouth should wear protective mask
	眼 应佩戴防护眼镜 Eye should wear protective glasses
	手 须戴不渗透的手套 Hand must wear impervious gloves
	其他 穿工作服 Others, wear overalls
通风设备注意事项 Ventilation equipment	必须配备强力抽风制备，便以随时保持作业环境内之空气许可值能高于本制品允许之最高吸放许可值。Must be equipped with strong ventilation to keep the air permit value in the working environment at any time. Can exceed the maximum allowable absorption permit value of this product.

<p>操作与储存注意事项 Operation and storage precautions</p>	<p>1. 定期进行健康检查, 工作服单独清洗, 受污染衣物处理后废弃。 2. 不用时必须随时封紧桶盖并储存于冰箱内。</p> <p>1. Regularly carry out health checkups, work clothes are cleaned separately, and discarded after being treated with contaminated clothing. 2. The lid must be sealed and stored in the refrigerator at any time when not in use.</p>
<p>个人卫生注意事项 Personal hygiene precautions</p>	<p>1. 不要用手接触 2. 作业完毕请即刻洗手 3. 工作场所禁止吃东西, 和饮料、抽烟或化妆。</p> <p>1. Do not touch with your hands 2. Wash your hands immediately after the homework is completed. 3. The workplace is forbidden to eat, drink, smoke or make up.</p>
<p>推荐个人使用防护用品 Recommend personal use of protective equipment</p>	

九、物理化学特性 Physical and Chemical Properties

物理状态 Physical state	膏状 paste	气味 Smell	极少刺激性 Smelless
PH	not applicable	比重 density (20℃)	4.0-4.5
沸点 (℃) boiling point	/	熔点 (℃) melt point	214-225
水溶解度 Hydrolysis temperature	/	蒸汽密度 vapor density (Air=1)	/
颜色 Color	金属灰色 Metal gray	挥发度 volatility	<20%IV

十、稳定性及化学反应特性 Stability and Reactivity

稳定性 Stability	常温下稳定 Stable at room temperature
应避免之状况 Conditions to be	应避免阳光直射、明火或高热, 避免接触水汽、酸碱, 强氧化剂 Avoid direct sunlight, open flames or high heat, avoid contact with

avoided	water vapor, acid and alkali, strong oxidants
有害之聚合 Harmful polymerization	无 No date
不相容物 Incompatible	避免与水汽、酸碱或氧化性东西接触。Avoid contact with water, acids, or oxidizing things

十一、毒理学资料 Toxicological Information

急性毒性 acute toxicity	本品的烟尘和烟雾对眼睛、皮肤以及呼吸道粘膜有刺激作用，并可导致倦睡头疼,咽喉疼痛以及其它过敏反应。The smoke and dust can irritate the eyes, skin and mucous membranes of the respiratory tract and cause drowsiness headaches, sore throats and other allergic reactions.
亚急性和慢性毒性 Subacute and chronic toxicity	本品产生的烟尘或烟雾可导致金属烟雾病。其症状类似感冒伴随发寒、发热、咳嗽、虚弱、胸口和肌肉疼痛并导致白细胞数量增加。过量或反复地接触本品烟尘可能导致锡肺尘症。The smoke or smoke produced by this product can cause metal fume disease. The symptoms are similar to a cold with chills, fever, cough, weakness, chest and muscle pain, and an increase in the number of white blood cells. Excessive or repeated exposure to the smoke and dust of this product may cause tin pneumoconiosis.
致敏性 Allergenicity	No data
致 癌 性 Carcinogenicity	无任何成分被美国国家毒理计划(NTP)和国际癌症研究机构(IARC)归入致癌物质 No ingredients are classified as carcinogens by the National Toxicology Program (NTP) and the International Agency for Research on Cancer (IARC)

十二、生态学资料 Ecological Information: 有关焊锡中有害物质的规定符合 ROHS 标准。推广使用无铅低温焊料代替中高温焊料，可节能减排，以及随着电子微型化的发展，电子连接采用微电子焊料能耗更低，利于环境保护。无其他生态学资料。The regulations on hazardous substances in solder comply with ROHS standards. The promotion of the use of lead-free low-temperature solder instead of medium-high temperature solder can save

energy and reduce emissions, and with the development of electronic miniaturization, the use of microelectronic solder for electronic connection is lower in energy consumption and environmental protection. No other ecological information.

十三、废弃处理 Disposal

废弃物性质 nature	危险废物 Hazardous Waste
废弃处置方法 Disposal methods	将泄漏物及废弃物收集至密闭容器中，运送到指定的废弃危险化学品处理场所处理。Collect the leaks and wastes in airtight containers, and transport them to designated disposal sites for hazardous chemicals.
废弃注意事项 considerations	遵照国家和地方政府有关条例处理产品废物和产品残余部分 Dispose of product waste and product residues in accordance with relevant national and local government regulations.

十四、运输信息 Transportation Information: 本品不属于运输危险品。避免在爆晒和阳光直射下进行运输。This product is not dangerous for transportation. Avoid transportation in the sun and direct sunlight.

十五、法规信息 Regulatory information

危险类别 联合国危险类别：无 中国危险类别： 无

Hazard category UN hazard category: none China hazard category: none

十六、其他信息 Other information

所提供的资料是根据在实验室条件下进行的试验。关于产品在实际情况下的行为的可靠信息以及它对特定用途的适用性不能从这个结论中得出结论。用户有责任通过考虑所有特定的需求来测试产品的适用性。所提供的所有数据和信息都是在实验室条件下测量的典型平均值或唯一确定的参数;因此，对于特定的产品属性或产品是否适合某一特定用途并没有保证。The information provided is based on tests conducted under laboratory conditions. Reliable information about the behavior of the product under actual conditions and its suitability for specific purposes cannot be drawn from this conclusion. It is the user's responsibility to test the applicability of the product by considering all specific requirements. All data and information provided are typical average values or uniquely determined parameters

measured under laboratory conditions; therefore, there is no guarantee for specific product attributes or product suitability for a specific purpose.

填写日期: 2024 年 3 月 28 号 Date of completion: MAR 28, 2024