

# HENGHUI Technology Corporation limited

## SDS (Safety Data Sheet)

### 安全资料表

<b>1 Chemical Product and Company Identification 品名及公司资料</b>	
Product Name 品名	A194FH Ag plated lead frame A194FH 镀银引线框架
Product Code 物品编号	
Manufacturer 制造商	HENGHUI Technology Corporation limited 新恒汇电子股份有限公司
Address 地址	187 Zhongrun Avenue, high tech Zone, Zibo, Shandong 山东省淄博市高新区中润大道187号
Telephone 电话	+86-533-2221999
Fax Number 传真	+86-533-3982701

<b>2 Hazard identification 危害辨识资料</b>	
Emergency Overview 紧急综述	<p>The lead frame products Ag plating are non hazardous in their as-shipped form.</p> <p>However, incorrect handling of the lead frame. The products made there or. Or production scrap generated may lead to injuries .Operations generating dust or fumes, such as grinding, polishing, may create health hazards by inhalation or by irritation of the eyes.</p> <p>A reaction of a few chemical substances with this product. Or its production scrap as well as dust or fumes generated during production, may produce poisonous substances or explosive gases.</p> <p>引线框架产品镀银是非危险的发运形式。</p> <p>然而引线框架的不正确处理。产品生产的废料可能会导致伤害，产生粉尘或烟雾的作业，如研磨、抛光，可能会因吸入或刺激眼睛而造成健康危害。</p> <p>少数化学物质，这种产品的反应。或其边角料生产以及生产过程中产生的粉尘或烟雾，可能产生有毒的物质或爆炸性气体。</p>
Potential Health Effects 健康危害效应	<p>Eye 眼睛: Classification not possible</p> <p>Skin 皮肤: Classification not possible</p> <p>Ingestion 吞食: Classification not possible</p> <p>Inhalation 吸入 : Metallic taste, dryness of the throat, sneezing, respiratory tract irritation, mixed pneumoconiosis, chills, metal fume fever, shortness of breath, chest pain, weakness, fatigue, cough, muscle and joint pain.</p> <p>金属味、咽喉干燥、喷嚏、呼吸道刺激、混合性尘肺、寒颤、金属烟</p>

	雾热、气短、胸痛、虚弱、疲劳、咳嗽、肌肉和关节痛
HMIS CODE 危害物质咨询代码	Health 健康 : N/A Flammability 易燃性: N/A Physical Hazard 物理危害: N/A Personal Protection 个人防护: N/A
Environmental Effects 环境影响	Hazardous to The Aquatic Environment (Acute): Classification not possible 对水生环境危害（急性）：分类不可能 Hazardous to The Aquatic Environment (Chronic): Classification not possible 对水生环境危害（慢性）：分类不可能
Physical and Chemical Hazards 物理及化学的危害	Copper: Irritations of upper airway (single exposure) Liver disease(long term or repeated exposure in a high aerial density) Metal Hume fever (fume's inhalation). 铜: 上气道炎症（单曝光） 肝脏疾病（在空气中的密度高，长期或反复接触） 休姆金属发热（烟的吸入）
Specific Hazards 特殊危害	N/A

### 3 Composition and information on Ingredients 成分辨识资料

Chemical Ingredients (Main) 化学成分（主要）	CAS Number	Percent Weight (%)	OSHA PEL-TWA
Copper(Cu)	7440-50-8	balance	
Chemical Ingredients (Minor) 化学成分（次要）	CAS Number	Percent Weight (%)	OSHA PEL-TWA
Iron(Fe)	7439-89-6	2.10~2.60	
Lead(Pb)	7439-92-1	0.01Max	
Phosphorus(P)	7723-14-0	0.015~0.150	
Zinc(Zn)	7440-66-6	0.050~0.200	
Silver(Ag)	7440-22-4	5.0Max	

### 4 Emergency and first aid procedures 急救措施

First Aid Information in Different Exposed Way 不同暴露途径的急救措施	Eye CONTACT 眼睛接触 Wash the eye for 15minutes more by a stream or clean water ,and see a doctor . 用干净的清水冲洗眼睛 15 分钟，并请医生就诊。 Skin Contact 皮肤接触： Wash the mouth well with water, and flush it with bags of water. 用干净的清水冲洗口腔。
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	<p><b>Ingestions 吞食:</b> Wash the mouth well with water and, if possible, induce vomiting, then immediately arrange for medical treatment. 立即进行催吐处理并及时送医治疗。</p> <p><b>Inhalation 吸入:</b> When inhaling voluminously transfer the patient to a fresh place or air at once. The patient should be kept warm and at rest while a doctor is sent for. 立即将病人转移到空气流通的环境，注意病人的保暖及休息并及时送医治疗。</p> <p><b>Hazards Effects 危害效应:</b> In the situation handled with the product machined <b>Skin Contact:</b> If heated chips, ECT., adhere to your skin to cause a minor burn, immediately allow the affected part to cool under plenty of running water. In the situation handled with the product melted <b>Inhaled:</b> Transfer the patient to a fresh place of air once, Practice artificial respiration at once when respiratory difficulty or asphyxia is perceived. 在处理与产品加工的现状 皮肤接触：如果加热芯片，ECT，会对你的皮肤造成轻微的灼伤，立即用大量的冷却水冲洗灼伤部位。 皮肤接触：如果加热芯片，ECT。 ，坚持你的皮肤造成轻微的灼伤，立即让受影响的部分冷却水大量复制下。 在处理与产品情况融化 吸入：将病人转移到新鲜空气流通的环境，在呼吸困难或窒息时立即进行人工呼吸</p> <p><b>Notes to Physicians 对医师之指示:</b> N/A</p>
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<b>5 Fire Fighting Measures 灭火措施</b>	
Flash point 燃点	N/A
Flammability Classification 易燃性分类	N/A
Extinguishing Media 灭火剂	N/A (stable, nonflammable substance)
Unusual Fire and Explosion Hazards 特别的火灾和爆炸危害	Metal products do not present fire or explosion hazards under normal conditions. 在正常条件下金属制品不存在火灾或爆炸的危险
Fire-Fighting Methods 灭火方法	Not specified 没有指定
Hazardous Combustion	N/A

Products 危险的燃烧物	
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<b>6 Accidental Release Measures 渗漏处理方法</b>	
Precautions and Equipment 预防措施及设备	Not applicable for the solid 不适用于固体
Methods For Clean-up 清洗方法	Not applicable for the solid 不适用于固体
Personal Precaution 个人防护措施	Not applicable for the solid 不适用于固体

<b>7 Handling and storage 处置及储存</b>	
Handling 处置	Put safety gloves on to protect your hands from edges of coils which might cut your hands? Wear safety glasses when metal powders or chips are expected to be generated in the work. 产品加工过程中可能会产生金属粉末和边缘废料，请佩戴安全手套和防护眼镜避免伤害。
Storage 储存	The environment of stocking area should be free from acid, alkali, chloride, sulfide and other corrosive chemicals to prevent from rusting or corrosion. Good housekeeping in order to prevent the accumulation of dust. Storage in original vacuum sealed packing. Storage condition: 19 to 25 and relative humidity 60%. 储存区的环境应无酸、碱、氯化物、硫化物等腐蚀性化学物质，防止生锈或腐蚀，防止灰尘的积累。 在原储存真空密封包装。 储存条件：19 至 25 摄氏度和 60%相对湿度。

<b>8 Exposure Controls And Personal Protection 暴露控制及个人防护</b>	
Eye 眼睛	Protective goggles are recommended, depending upon how the semis are further processed. 半成品进一步加工建议佩戴护目镜。
Skin 皮肤	Use rubber glove to prevent mechanical injury. 使用安全手套，防止机械损伤。
Ingestion 吞食	Wearing a mask be recommend in the work such as abrasion and baffling .Which generates metal powders or chips 在工作中可能会产生金属粉末或碎屑的障碍物，建议戴上口罩。
Inhalation 吸入	None normally needed. If exposure exceeds the PEL/TLV, use NIOSH approved respiratory protection equipment. 通常不需要。如果曝光超过 PEL / TLV，使用 NIOSH 认证的呼吸防

	护设备
Engineering Control 工程控制	Put safety shoes on when handling heavy coils. 处理重卷时要穿安全鞋。

<b>9 Physical And Chemical Properties 物理及化学特性</b>	
Appearance 外观	Solid 固体
Odor 气味	Odorless 无味
PH 酸碱值	Not applicable 不适用
Boiling Point 沸点	Not applicable
Decomposition 分解	Not applicable
Melting Point 熔点	Not applicable
Flash Point 燃点	Not applicable
Freezing Point 凝固点	Not applicable
Auto-ignition Temperature 自燃温度	Not applicable
Explosion Properties 爆炸特性	Not applicable
Flammability 易燃性	Not applicable
Evaporation Rate 挥发速率	Not applicable
Vapor Pressure 蒸汽压	Not applicable
Vapor Density(Air=1) 蒸汽密度	Not applicable
Specific Gravity (H2O=1) 比重	8.8(g/cm)
Solubility In H2O 水中溶解度	Insoluble 不溶解

<b>10 Stability And Reactivity 安全性及反应性</b>	
Chemical Stability 化学安全性	Stable 稳定
Conditions To Avoid 应避免状况	Nothing 无
Materials To Avoid 应避免物质	Nothing
Hazardous Decomposition Products 危害分解物	Nothing

<b>11 Toxicological Information 毒性资料</b>	
Acute Toxicity 急毒性	There is no information no the toxicity of this material. Under normal handing and use of the solid form of this material there are few health hazards. 没有信息，没有这种材料的毒性。正常的处理和使用这种材料的固体形式很少有健康危害
Carcinogenicity 致癌性	Copper is classified into D (material that cannot be classified into human carcinogenicity by EPA (1991). 铜分为 D（材料不能分类为人类致癌的 EPA（1991）
Sensitization 过敏性	Skin Sensitization: Copper is classified into the second crowd of skin sensitization (Material which might have sensitization to person) by the Japan Society for Occupational Health (Recommendation; 2004). 皮肤致敏：铜被列为日本协会职业健康的第二批皮肤致敏物质（可能对人敏感的物质）（推荐；2004）
Chronic Toxicity 慢毒性	Data none 无数据

<b>12 Environmental protection information 环境保护信息</b>	
Eco Toxicity 生态毒性	No data is available on this product. Individual constituents are as follows as Silver; The toxicity of copper to aquatic organisms varies significantly not only with the species, but also with physical and carbon dioxide content. Copper concentrations varying from 0.1 to 1.0mg/L have been found by various investigators to be not toxic for most fish. However, concentrations of 0.015to 3.0 mg/L have been reported as toxic, particularly in soft water to many kinds of fish, crustaceans, mollusks, insects and plankton. 没有可用的数据对该产品。个别成分如下：铜对水生生物的毒性不仅与物种显著不同，而且与物理和二氧化碳含量有很大的差异。铜的浓度从 0.1 变化到 1.0mg/L 已经通过各种调查发现是不是有毒的鱼类。然而，对 0.015to 3 mg / L 的浓度被称为有毒的，特别是在软的水许多种类鱼、甲壳动物、软体动物、昆虫和浮游生物
Persistence 持久性	N/A
Degradability 降解性	Will not degrade 不降解

Bioaccumulation 生物蓄积性	N/A
Mobility 移动性	N/A
Other adverse effects 其他不良效应	N/A

### 13 Disposal Information 处理信息

Waste disposal method 废弃物处置方法	Collect as metal because the substance that composes the product is recyclable, and consign it to the disposal contractor 金属回收，并交付给处置承包商
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### 14 Transportation information 运输资料

Shipping Basic Description 运输基本描述	N/A
UN No.联合国编号	N/A
Internal Transport 国内运输规定	N/A
Notes 注意事项	N/A
Transportation hazardous material 运输材料的危害	Not a hazardous material for shipping. 运输过程没有危害

### 15 Regulatory Information 法规资料

Data none  
无数据

### 16 Other Information 其他资料

<b>Additional Information</b> 补充说明	NO	
Data Prepared By 制表	Company 公司	HENGHUI Technology Corporation limited 新恒汇电子股份有限公司
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