

1、Supplier information 供货商资料

Terminal 物品名称: Tin-plated 镀锡
Supplier name: BRIGHT-E ELECTRONIC TECHNOLOGY LIMITED 供货商名称 : 東莞市華晶電子有限公司
Address: No.1 He Shi Road, Huang Ni Tang, ChangPing Town, DongGuang City, GuangDong Province 地址 : 广东省東莞市常平鎮黃泥塘禾石路1号
Emergency contact person: Mr. Dong 紧急联络人: 董先生 Emergency contact number: 0769-81089582 Fax: 0769-81089581 紧急联系电话: 0769-81089582 传真: 0769-81089581

2、Component identification data 成份辨识资料

English and Chinese name: gold plating 中英文名称 : 鍍金		
Component name 成份名称	CAS NO.	Content(%)含量
Sn	7440-31-5	99.96%
Pb	7439-92-1	0.0035%
Cu	7440-50-8	0.01%
Other	/	0.0265%

3、Hazard identification data 危害辨识数据

The most important harmful effect 最重要危害效应
Health hazard effect: the liquid is absorbed by inhalation, ingestion and contact with skin. Tin dust can cause tin lung, which may cause neurotoxicity, lead to respiratory tract and digestive tract, and partially damage skin mucosa. In severe cases, the digestive tract may be malignant, vomiting, abdominal pain and constipation may cause ulcer neurotoxicity. In the early stage, it is listless and obviously weak, and in the later stage, it is chronic dizziness and headache. 健康危害效应: 液体时通过吸入、食入、与皮肤接触途径被吸收, 锡粉尘可导致锡肺的发生, 而且可以有神经毒害, 引韦呼吸道, 消化道, 部分损害皮肤粘膜, 严重时消化道可出现恶性, 呕吐, 腹痛, 便秘皮肤可出现溃疡神经毒害, 早期为精神萎靡, 明显乏力, 后期为慢性头晕, 头痛
Environmental impact: Pb<100Ppm, Cd<5Ppm, Hg<2Ppm, Cr(+6)<5Ppm, 环境影响: Pb<100Ppm, Cd<5Ppm, Hg<2Ppm, Cr (+6) <5Ppm,
Physical and chemical hazards: tin has almost no acute toxicity, and its powder has high chemical activity, which will cause oxidation reaction when exposed to air 物理性及化学危害: 金属锡几乎没有急性毒性, 其粉体化学活性较高, 暴露在空气中会发生氧化反应
Special hazards: liquid can be absorbed by inhalation, ingestion and contact with skin. Tin dust can cause tin lung, and can cause neurotoxicity, which can lead to respiratory tract and digestive tract, and partially damage skin mucosa. In severe cases, the digestive tract can be malignant, vomiting, abdominal pain and constipation can cause ulcer neurotoxicity. In the early stage, it is listless and obviously weak, and in the later stage, it is chronic dizziness and headache. 特殊危害: 液体时通过吸入、食入、与皮肤接触途径被吸收, 锡粉尘可导致锡肺的发生, 而且可以有神经毒害, 引韦呼吸道, 消化道, 部分损害皮肤粘膜, 严重时消化道可出现恶性, 呕吐, 腹痛, 便秘皮肤可出现溃疡神经毒害, 早期为精神萎靡, 明显乏力, 后期为慢性头晕, 头痛

Main symptoms: the liquid is absorbed by inhalation, ingestion and contact with skin. Tin dust can lead to the occurrence of tin lung, which can cause neurotoxicity, lead to respiratory tract and digestive tract, and partially damage the skin mucosa. In severe cases, the digestive tract can be malignant, vomiting, abdominal pain and constipation can cause ulcer neurotoxicity. In the early stage, it is listless and obviously weak, and in the later stage, it is chronic dizziness and headache

主要症狀：液體時通過吸入、食入、與皮膚接觸途徑被吸收，錫粉塵可導致錫肺的發生，而且可以有神經毒害，引韋呼吸道，消化道，部分損害皮膚粘膜，嚴重時消化道可出現惡性，嘔吐，腹痛，便秘皮膚可出現潰瘍神經毒害，早期為精神萎靡，明顯乏力，後期為慢性頭暈，頭痛

Hazard classification of articles: non-toxic, belonging to RoHS-compliant environmental protection products
物品危害分類：無具毒性，屬符合 RoHS 的環保產品

4、 first aid treatment 急救措施

Different exposures One of the ways First aid method: 不同暴露途徑之急救方法

Inhalation: Quickly transfer the site to fresh air and keep the respiratory tract unobstructed.

If breathing is difficult, give oxygen. If breathing stops, give artificial respiration for medical treatment.

吸入：迅速轉移現場至空氣新鮮處，保持呼吸道通暢，如呼吸困難，給輸氧，如呼吸停止，即進行人工呼吸就醫。

Skin contact: Take off contaminated clothes and wash skin thoroughly with soapy water and clear water.

皮膚接觸：脫去被污染的衣着，用肥皂水和清水徹底沖洗皮膚。

Eye contact: Immediately lift eyelid, rinse thoroughly with plenty of running water or normal saline for at least 15 minutes, and seek medical attention.

眼睛接觸：立即提起眼瞼，用大量流動清水或生理鹽水徹底沖洗至少 15 分鐘並就醫。

Intake: Drink plenty of warm water, induce vomiting and seek medical advice.

食入：飲足量溫水，催吐並就醫。

The most important harmful effects: none

最重要危害效應：無

5、 Fire extinguishing measures 滅火措施

Applicable fire extinguishers: fire water, sand and dry powder fire extinguishers.

適用滅火器：消防水、沙土、干粉滅火器。

Special hazards may be encountered when extinguishing fire: tin oxide may be decomposed

滅火時可能遭遇特殊危害：可能分解氧化錫

Special fire extinguishing program: none

特殊滅火程序：無

Special protective equipment for firefighters: Firefighters must wear filter-type gas masks (full-face masks) or isolated respirators, and wear full-body fire protection and gas protection suits to extinguish fires at windward places.

消防人員之特殊防護設備：消防人員必須佩戴過濾式防毒面具(全面罩)或隔離式呼吸器、穿全身防火防毒服，在上風處滅火。

6、Leakage treatment method 泄漏处理方法

Personal precautions: isolate leakage and pollution areas, limit access, and cut off fire sources; emergency response personnel are advised to wear self-priming filter dust masks and anti-virus clothing. Do not come into direct contact with leakage. Collect it in a dry, clean and covered container with spark-free tools, transfer it for recycling, and hand it over to a professional recycling company for unified treatment.

个人应注意事项:隔离泄漏污染区,限制出入,切断火源;建议应急处理人员戴自吸过滤式防尘口罩,穿防毒服。不要直接接触泄漏物。使用无火花工具收集于干燥、洁净、有盖的容器中,转移回收,固体交专业回收公司统一处理

Leakage treatment method: isolate the leakage pollution area, limit access and cut off the fire source; it is recommended that emergency personnel wear self-priming filter dust mask and anti-virus clothing. Do not come into direct contact with leakage. Collect it in a dry, clean and covered container with spark-free tools, transfer it for recycling, and hand it over to a professional recycling company for unified treatment.

泄漏处理方法:隔离泄漏污染区,限制出入,切断火源;建议应急处理人员戴自吸过滤式防尘口罩,穿防毒服。不要直接接触泄漏物。使用无火花工具收集于干燥、洁净、有盖的容器中,转移回收,固体交专业回收公司统一处理;

Cleaning method: isolate the leakage and pollution area, limit access and cut off the fire source; it is recommended that emergency personnel wear self-priming filter dust mask and anti-virus clothing. Do not come into direct contact with leakage. Collect it in a dry, clean and covered container with spark-free tools, transfer it for recycling, and hand it over to a professional recycling company for unified treatment.

清理方法:隔离泄漏污染区,限制出入,切断火源;建议应急处理人员戴自吸过滤式防尘口罩,穿防毒服。不要直接接触泄漏物。使用无火花工具收集于干燥、洁净、有盖的容器中,转移回收,固体交专业回收公司统一处理;

7、Safe disposal and storage method 安全处置与储存方法

Disposal: Keep the liquid sealed, store and move to reduce collision or extrusion, and keep it in a dry and ventilated place. Operators should receive professional training.

处置:液体密封储存放置移动时减少碰撞或挤压,尽放在干燥,通风处,操作人员要经过专业培训。

Storage: Do not place it in the same place as organic oxides, and avoid placing it in high-temperature and humid places

储存:不可与有机氧化物放在同一场地,避免高温潮湿的地方放置

8、Exposure prevention measures 暴露预防措施

Engineering control: none 工程控制:无

Parameter control: none 参数控制:无

Personal protective equipment: gloves, masks and rubber shoes. 个人防护设备:手套,面具,胶鞋。

Respiratory protection: You should wear self-priming filter dust mask when you may come into contact with its dust.呼吸防护:可能接触其粉尘时,应该佩戴自吸过滤式防尘口罩。

Eye protection: Wear chemical safety glasses. 眼睛防护:戴化学安全防护眼镜

Hand protection: wear chemical gloves. 手部防护:戴防化学品手套。

Skin and body protection: penetrating gas type anti-virus clothing. 皮肤及身体防护:穿透气型防毒服。

Hygienic measures: It is strictly forbidden to eat in the workplace. After work, take a shower and change clothes, pay attention to personal hygiene, and deal with skin scratches at work in time.

卫生措施:严禁在工作场所进食,工作完毕,淋浴更衣,注意个人清洁卫生,工作时皮肤划伤应及时处理。

9、 Physical and chemical properties 物理及化学性质

Material state: silvery white metal	物质状态: 银白色金属
Form: solid	形态: 固态
Color: silvery white	颜色: 银白色
Smell: None	气味: 无
Boiling point/boiling point range: 2270°C	沸点/沸点范围: 2270°C
Decomposition temperature: It does not react with dilute sulfuric acid and hydrochloric acid at normal temperature, but is soluble in dilute nitric acid and hot alkali. 分解温度: 常温下不与稀硫酸、稀盐酸起作用, 但可溶于稀硝酸和热碱	
Natural temperature: none	自然温度: 无
Vapor pressure: none	蒸气压: 无
Density: 5.75g/cm ³	密度: 5.75g/cm ³
Solubility: 231.9-233°C	溶解度: 231.9-233°C

10、 Stability and reactivity 安定性及反应性

Stability: stability	安定性: 稳定
Possible hazardous reactions under special conditions: no data available 特殊状况下可能危害反应: 无资料	
Conditions to be avoided: heat source, water source and strong oxidant 应避免状况: 热源, 水源, 强氧化剂	
Substances to be avoided: None 应避免之物质: 无	
Hazardous decomposition products: tin oxide can be produced when it reacts with strong acid 危害分解物: 遇强酸反应, 可产生氧化锡	

11、 Toxicity data 毒性资料

Acute toxicity: Tin is difficult to metabolize inhuman body and often accumulates in liver and other places. Long-term contact will lead to tin poisoning. Ecological data Organic tin can cause acute toxic encephalopathy. 急性: 锡在人体内难以代谢, 经常在肝脏等处积累, 长期接触会导致锡中毒生态资料有机锡可引起急性中毒性脑病。
Sensitivity: Tin is difficult to metabolize in human body, and often accumulates in liver and other places. Long-term contact will lead to tin poisoning. Ecological data Organotin can cause acute toxic encephalopathy. 致敏感性: 锡在人体内难以代谢, 经常在肝脏等处积累, 长期接触会导致锡中毒生态资料有机锡可引起急性中毒性脑病。
Local effects: Tin is difficult to metabolize in human body and often accumulates in liver and other places. Long-term contact will lead to tin poisoning. Ecological data Organic tin can cause acute toxic encephalopathy. 局部效应: 锡在人体内难以代谢, 经常在肝脏等处积累, 长期接触会导致锡中毒生态资料有机锡可引起急性中毒性脑病。
Slow toxicity or long-term toxicity: Tin is difficult to metabolize in human body and often accumulates in liver and other places. Long-term contact will lead to tin poisoning. Ecological data Organic tin can cause acute toxic encephalopathy. 慢毒性或长期毒性: 锡在人体内难以代谢, 经常在肝脏等处积累, 长期接触会导致锡中毒生态资料有机锡可引起急性中毒性脑病。
Special effects: Tin is difficult to metabolize in human body and often accumulates in liver and other places. Long-term contact will lead to tin poisoning. Ecological data Organic tin can cause acute toxic encephalopathy. 特殊效应: 锡在人体内难以代谢, 经常在肝脏等处积累, 长期接触会导致锡中毒生态资料有机锡可引起急性中毒性脑病。

12、 Waste disposal method 废弃处置方法

Waste disposal method: the liquid is discharged into the special system for heavy metal wastewater for treatment, the PH value is neutralized, and nickel metal is trapped at the same time. It is not allowed to flow into ponds and water sources; solids are handed over to professional recycling companies for unified recycling;

废弃处置方法:液体排入重金属废水专用系统处理, 中和 PH 值, 同时捕集镍金属. 不可流入池塘, 水源地方;
(固体交专业回收公司统一回收处理);

13、 Ecological data 生态资料

Possible environmental impact/environmental distribution, it pollutes environment when liquid is used, and welding smoke pollutes environment. Waste tin should not be thrown into places that cannot flow into ponds and water sources.

可能环境影响:在液体时对环境有污染, 焊烟对环境有污染, 废锡不可丢到不可流入池塘, 水源地方,

14、 Transport information 运送资料

International transportation regulations: Liquid shall be stored and transported in a sealed manner, without collision or extrusion, mixed with oxidant alkaline substances and food; solid package shall be transported completely, without collision or extrusion, mixed with oxidant alkaline substances and food.

国际运送规定:液体密封储存运输, 严禁碰撞或挤压, 与氧化剂碱性物及食物混运; 固体包装完整运输, 严禁碰撞或挤压, 与氧化剂碱性物及食物混运。

UNNo.: None 联合国编号: 无

Domestic transportation regulations: Liquid shall be stored and transported in a sealed manner, and collision or extrusion shall be prohibited, which shall be mixed with oxidant alkaline substances and food; solid package shall be transported completely, and collision or extrusion shall be prohibited, which shall be mixed with oxidant alkaline substances and food..

国内运送规定:液体密封储存运输, 严禁碰撞或挤压, 与氧化剂碱性物及食物混运; 固体包装完整运输, 严禁碰撞或挤压, 与氧化剂碱性物及食物混运。

Special transportation methods and precautions: liquid is stored and transported in a sealed manner, and collision or extrusion is forbidden, which is mixed with oxidant alkaline substances and food; solid package is completely transported, collision or extrusion is forbidden, which is mixed with oxidant alkaline substances and food.

特殊运送方法及注意事项:液体密封储存运输, 严禁碰撞或挤压, 与氧化剂碱性物及食物混运; 固体包装完整运输, 严禁碰撞或挤压, 与氧化剂碱性物及食物混运。

15、 Regulatory data 法规资料

Applicable laws and regulations: labor safety and health law and its implementation rules, storage and disposal methods of industrial wastes, road traffic safety rules, RoHS regulations and REACH regulations

适用法规: 劳工安全卫生法及实行细则、事业废弃物储存清处理方法、道路交通安全规则、RoHS 法规、REACH 法规

16、 other 其它

This data sheet describes our existing knowledge of products in the state of delivery in terms of environmental protection and labor safety.

本资料表描述了我们在交付状态下在环境保护和劳动安全方面的现有知识。

However, this data sheet does not guarantee the performance of some products and is not legally binding.

然而, 本资料表并不保证某些产品的性能, 也不具有法律约束力。

工程专用章