



东莞市华彩威科技有限公司

Material Safety Data Sheet 物质安全资料表(MSDS)

一、物品与厂商资料/Product and Company Identification

物品名称 Product Name: 发光二极管 Light Emitting Diode
物品编号 Product Code: WS2812 / WS2813 / WS2815 / WS2816 系列发光二极管
制造商地址及电话 Address/Tel.: 东莞市大岭山镇大岭村纵队路 93 号 5F, E# Bldg., No.93 ZongDui Road, DaLing Village, DaLingShan Town, DongGuan 523820
紧急联络电话Emergency Phone Number:

二、成分辨识资料/Composition, Information on Ingredients

成分名称 Component Chemica Name :	Main components	Weight ratio	CAS 号
芯片 Chip	Si、Al、Ga、P、In	3.12%	7440-21-3 7429-90-5 7440-55-3 7723-14-0 7440-74-6
	Al ₂ O ₃ 、Ga、N		1344-28-1 7440-55-3 7727-37-9
支架 Lead Frame	Cu、Ag、Ni Polyphosphoric acid / Epoxy resin	81.18%	7440-50-8 7440-22-4 7440-02-0 8017-16-1 65997-17-3
环氧树脂胶 Epoxy	Epoxy resin	15.4%	24969-06-0
金线 Gold Wire	Au	0.16%	7440-57-5
银胶 Silver glue 绝缘胶 Insulations	Epoxy resin Ag、Epoxy resin	0.14%	24969-06-0 7440-22-4

危害物质及英文名称 Chemical Name	浓度范围 (百万分之一) Wt.(ppm)	危害物质分类及圈式 Chemical
铅(Pb)	<5 ppm	N/A
镉 Cd	<5ppm	N/A
汞 Hg	<5ppm	N/A
六价铬 Cr6+	<8ppm	N/A
多溴联苯 PBBS	<5ppm	N/A
多溴二苯醚 PBDES	<5ppm	N/A



邻苯二甲酸二丁酯 DBP	<50ppm	N/A
邻苯二甲酸丁苄酯 BBP	<50ppm	N/A
邻苯二甲酸二酯 DEHP	<50ppm	N/A
邻苯二甲酸二异丁酯 DIBP	<50ppm	N/A

三、危害辨识资料/ Hazard Identification

最重要危害效应 Most Important Health Hazards and Reactions	健康危害效应/Health Hazards and Reactions: Ingestion, Give the water and try to get the victim to vomit Contact a physician as soon as possible
	环境影响/Environmental Impact: Not Application
	物理性及化学性危害/Physical and Chemical Hazards: No
	特殊危害/Specific Hazards: No
主要症状/Cardinal Symptoms: 咳嗽 Cough、剧烈的腹痛 Fierce abdominal pains	
物品危害分类/Hazard Classification: 3 Three	

四、急救措施/ First Aid Measures

不同暴露途径之急救方法/ First Aid Measures for Different Kinds of Exposures:
· 吸入/Inhalation: If affected move to fresh air, keep the victim at rest
· 皮肤接触/Skin Contact: Wipe off adhering powder and wash exposed area with lots of water and soap, Contact a physician if irritation occurs
· 眼睛接触/Eye Contact: Do not look directly into a lit LED; it could damage the eyes after only a few seconds.
· 食入/Ingestion: Ingestion, Give the water and try to get the victim to vomit Contact a physician as soon as possible
最重要症状及危害效应/Most Important Symptoms and Hazard Reactions: Not Application
对急救人员之防护/Protection to First-Aid Attendants: Not Application
对医师之提示/Suggestions to Doctors: Talk to the Doctors the product have Silver materials

五、灭火措施/ Fire Fighting Measures

适用灭火剂/Suitable Extinguishing Media: 灭火器(干粉、泡沫)Carbon dioxide, powder, foam, and dry sand
灭火时可能遭遇之特殊危害/Special Hazards in Fire: No
特殊灭火程序/Special Fire-Fighting Procedures: Dark smoke is generated at a fire.
消防人员之特殊防护设备/Required Special Protective Equipment for Fire-Fighters: Wear full protective clothing and self-contained breathing apparatus with full face-piece

六、泄漏处理方法/ Accidental Release Measures

个人应注意事项/ Personal Precautions: No.
环境注意事项/Environmental Precautions: No
清理方法/Methods for Cleaning: No application



七、安全处置与储存方法/ Handling and Storage

处置/Handling: 1.Work temperature $25 \pm 5^{\circ}\text{C}$; 2.Keep work humidity below60%; 3.Don't contact with fire, and check the line every stable time ; 4.Design should control the electronic line stop bombing. ;
储存/ Storage: The same with Handling

八、暴露预防措施/ Exposure Controls, Personal Protection

工程控制/ Engineering Measures: Not Application
控制参数/ Control Parameters: Not Application · 八小时日时量平均容许浓度(TWA)/短时间时量平均容许浓度(STEL)/最高容许浓度(CEILING): Not Application · 生物指标/ BEIs: Not Application
个人防护设备/ Personal Protection Equipment: · 呼吸防护/Respiration: If affected move to fresh air, keep the victim at rest · 手部防护/Hand: Wipe off adhering powder and wash exposed area with lots of water and soap, Contact a physician if irritation occurs · 眼睛防护/Eye: Do not look directly into a lit LED; it could damage the eyes after only a few seconds · 皮肤及身体防护/Skin & Body: Wipe off adhering powder and wash exposed area with lots of water and soap, Contact a physician if irritation occurs
卫生措施/Hygiene Measures: 使用手套 working with gloves

九、物理及化学性质/ Physical and Chemical Properties

物质状态/ State of Substance: 固态 Liquid	形状/Appearance:
颜色/Color: 白色 White	气味/Odor: No
pH 值/pH Value: Not Application	沸点/沸点范围/Boiling Point: No
分解温度/Decomposing Temperature: 220°C	闪火点 Flashpoint: 200°C 测试方法: ■ 开杯 闭杯 Test Methods: ■ Open Slot Closed Slot
自燃温度/Self-Igniting Temperature: 300°C	爆炸界限/Explosion Limits: Not Application
蒸气压/Vapor Pressure: Not Application	蒸气密度/Vapor Density: Not Application
密度/Density: Not Application	溶解度/Dissolution: Not Application

十、安定性及反应性/Stability and Reactivity

安定性/Stability: Stable
特殊状况下可能之危害反应/Possible Hazard Reaction Under Special Conditions: May occur extraordinary reaction when contacted with strong acids, alkalis, or oxidant and generate toxicity gas
应避免之状况/Conditions to Avoid: May occur extraordinary reaction when contacted with strong acids, alkalis, or oxidant and generate



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toxicity gas
应避免之物质/Materials to Avoid: May occur extraordinary reaction when contacted with strong acids, alkalis, or oxidant and generate toxicity gas
危害分解物/Hazardous Decomposition Products: No

十一、毒性资料/ Toxicological Information

急毒性/Acute Toxicity: Not Application
局部效应/Local Reactions: Not Application
致敏感性/Sensitivity: Not Application
慢毒性或长期毒性/Chronic or Long Term Toxicity: No
特殊效应/Special Reactions: Not Application

十二、生态资料/ Ecological information

可能之环境影响/环境流布/Possible Environmental Impact/Environmental Run-offs: No

十三、废弃处置方法/Disposal considerations

废弃处置方法/Disposal Methods: 属环保产品，可回收，如不需要可统一收集排放。

十四、运送资料/Transport information

国际运送规定/International Transportation Regulations: Not Application
联合国编号/UN Reference No.: No
国内运送规定/Domestic Transportation Regulations: Not Application
特殊运送方法及注意事项/Special Transportation Methods and Precautions: Not Application

十五、法规资料/Regulatory information

适用法规/Applicable Regulation: Not Application

十六、其他资料/Other information

参考文献 Ref. Document	No	
制表单位 Department	名称/Dept. Name: 东莞市市华彩威科技有限公司	
	地址/电话 Address/Tel.: 东莞市大岭山镇大岭村纵队路 93 号 5F, E# Bldg., No.93 ZongDui Road, DaLing Village, DaLingShan Town, DongGuan 523820	
制表人 Made By	职称/Title: 品质经理 Quality Manager	姓名Name:
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