



浙江华正电子集团有限公司

ZHEJIANG HUAZHENG ELECTRONIC GROUP CO.,LTD.

物质安全资料表

MATERIAL SAFETY DATA SHEET

1. 产品及公司名称 PRODUCT AND COMPANY IDENTIFICATION

产品名称:	FR-4 覆铜箔层压板 (H140-1)
PRODUCT NAME:	FR-4Copper Clad Laminate. (H140-1)
产品用途:	用于刚性及多层印制线路板
PRODUCT USE:	Base material for rigid and multilayer printed wiring board.
公司名称及地址:	浙江华正电子集团有限公司
Name of company and Address:	浙江省杭州市余杭镇金星工业区 Zhejiang HuaZheng Electronic Group Co., Ltd.
若需要更多信息, 请致电:	Jinxing Industrial Zone Yuhang Hangzhou Zhejiang
FOR MORE INFORMATION CALL:	P.R.China.
若紧急时, 请致电:	0571-88666999(周一 —— 周五, 8:30-17:00)
IN CASE OF EMERGENCY CALL:	(Monday-Friday, 8:00-17:00)
	0571-88666999
	(24Hours/day ; 7Days/Week)

2. 产品的主要成分/原料 MAIN COMPOSITION/INFORMATION ON INGREDIENTS

原料名称	重量% (典型值)
INGREDIENT NAME	WEIGHT% (typical)
玻璃纤维布:	40~60
Fibrous Glass:	
铜箔:	5~30
copper:	
环氧树脂:	25~45
Epoxy Resin:	

3. 危险性 HAZARDS IDENTIFICATION

潜在的危害健康的危险品:

POTENTIAL HEALTH HAZARDS:

皮肤:	粉末将导致中等程度皮肤过敏。
SKIN:	Dust may cause moderate skin irritation.
眼睛:	粉末将导致中等程度眼睛过敏。
EYES:	Dust may cause moderate eye irritation.
吸入物:	当生产时, 玻璃纤维粉末会从玻璃布中飞散出。
INHALATION:	Fibrous dust may be released from the fiber-glass cloth substrate when machined.



4. 首要援助措施 FIRST AID MEASURES

皮肤:	脱下已污染衣服, 用流动水洗。
SKIN:	Wash in flowing water or shower, remove contaminated clothing.
眼睛:	用流动水冲洗 15 分钟, 如过敏现象持续发生, 请求助于医生。
EYE:	用流动水冲洗 15 分钟, 如过敏现象持续发生, 请求助于医生。
吸入:	Irrigate with flowing water for 15 minutes. If irritation persists consult a physician.
INHALATION:	如粉末烟尘太多请转移到有新鲜空气的地方, 如没有呼吸, 请进行人工呼吸。并致电医生。
摄食:	If overcome by dust or smoke, move to fresh air. If not breathing, give mouth-to-mouth resuscitation, call physician.
INGESTION:	如吸入大量, 请致电医生。 If large amounts are ingested, consult physician.

5. 火灾测试 FIRE FIGHTING MEASURES

易燃烧性:	不适用
FLAMMABLE PROPERTIES:	N/A
闪点:	不适用
FLASH POINT:	N/A
闪点方式:	不适用
FLASH POINT METHOD:	N/A
自然点温度:	无规定
AUTOIGNITION TEMPERATURE:	Not determined
燃烧上限:	不适用
UPPER FLAME LIMIT (volume% in air) :	N/A
燃烧下限:	不适用
LOWER FLAME LIMIT (volume% in air) :	N/A
燃烧等级:	UL V-0
FLAME PROPAGATION RATE(solids):	UL V-0
OSHA 燃烧级别:	不适用
OSHA FLAMMABILITY CLASS:	N/A
灭火介质:	水、CO ₂ 及干化学品
EXTINGUISHING MEDIA:	Water、CO ₂ and dry chemical
特别火灾指导:	
SPECIAL FIRE FIGHTING PRECAUTIONS/INSTRUCTIONS:	
消防员须身穿保护装置及正压呼吸设施。	
Firemen should wear proper protective equipment and positive pressure self-contained breathing apparatus.	

6. 意外事故的应变措施 ACCIDENTAL RELEASE MEASURES

(通常身穿所推荐的保护设施) 有关泄露应报告当地政府。
(Always wear recommended personal protection equipment).Spills and releases may have to be reported to local government.

7.操作处置与储存方法 HANDLING AND STORAGE

操作处置:	对于短暂的接触板料, 需要时清洗身体或衣服, 无预防措施。当接触时间延长或者接触重复发生时可带手套。
HANDLING:	For brief contact to CCL ,no precautions other than clear body-covering clothing should be needed.
其它建议:	无
ADDITIONAL RECOMMENDATIONS:	N/A
储存方法:	以包装形式储存于阴凉、干燥的库房。温度≤30℃; 相对湿度≤60%。
STORAGE	Keep products closed in a cool and dry place with packing. Temperature≤30℃; Relative humidity≤60%.

8.泄露控制个人防护 EXPOSURE CONTROLS/PERSONAL PROTECTION

工程控制:	使用当地除尘通风设施
ENGINEERING CONTROLS:	Use local exhaust ventilation to control dust.
个人防护措施:	
PERSONAL PROTECTIVE EQUIPMENT:	
皮肤保护:	对于短暂的接触粉尘, 需要时清洗身体或衣服, 无预防措施。当接触时间延长或者接触重复发生时可带手套和围裙。
SKIN PROTECTION:	For brief contact to dust ,no precautions other than clear body-covering clothing should be needed.
眼睛保护:	当使用有关材料时使用眼睛保护装置
EYE PROTECTION:	Use appropriate eye protection when machining material
呼吸保护:	大气中的玻璃纤维、铜箔粉尘颗粒必须低于暴露准则, 当进行某种操作时使用规范的粉尘防毒面罩。
RESPIRATORY PROTECTION:	Atmospheric levels of Fibrous glass and copper dust should be maintained below exposure guidelines. When respirator protection is required for certain operations. Use a NIOSH-proved dust respirator.
其它建议:	无
ADDITIONAL RECOMMENDATIONS:	N/A



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暴露准则:

EXPOSURE GUIDELINES:

成分名称(Ingredient Name)	ACCIHTLY	OSHAPEL	其它极限
玻璃纤维粉尘(Fibrous Glass Dust)	10 mg/m ³	15 mg/m ³	N/A
铜箔粉尘(Copper Dust)	1 mg/m ³	1 mg/m ³	N/A

9.物理性能 PHYSICAL AND CHEMICAL PROPERTIES

外观:	黄色或黄褐色板
APPEARANCE:	Yellow to amber sheets
气味:	无味, 除非加热
ODOR:	None, unless heated
比重:	(水=1.0) 1.6 ± 0.30
SPECIFIC GRAVITY:	(Water=1.0) 1.6 ± 0.30
水溶性:	(重量%) 在水中可忽略
SOLUBILITY IN WATER:	(Weight%) Negligible in water

10.稳定性及反应性 STABILITY AND REACTIVITY

通常稳定:	稳定
NORMALLY STABLE:	Stable
不兼容性:	不确定
INCOMPATIBILITIES:	Not determined
危险的腐化产品:	CO、CO ₂ 、HBr、NO _x (当加热超过 300℃)
HACARDOUS DECOMPOSITION PRODUCTS:	CO、CO ₂ 、HBr、Oxides of nitrogen, if heated in excess of 300 °C
危险聚合物:	无
HAZADOUS POLYMERIZATION:	None

11.毒物学的资料 TOXICOLOGICAL INFORMATION

敏感反应:	灰尘将导致眼、皮肤中度过敏。
IMMEDIATE(ACUTE)EFFECTS:	Dust may cause moderate eye、skin and respiratory irritation.
慢性反应:	不知
DELAYED(SUBCHRONIC&CHRONIC)EFFECTS:	None know

12.生态学资料 ECOLOGICAL INFORMATION

非生物降解	Not biodegradable
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13.排放程序及废物处理 SPILL PROCEDURES AND WASTE DISPOSAL



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排放程序:	如果材料不被污染, 将其装入清洁的容器中再使用, 如果被污染, 将其装入容器中等待处理。
SPILL PROCEDURES:	If material is not contaminated, scoop it into clean containers for use. If it is contaminated, scoop it into containers for disposal.
废物处置方法:	根据当地法规, 将加工处理出来的废物由合格的清运商进行填埋是可接受的处置方法。
WASTE DISPOSAL METHOD:	Landfilling of cured material in a licensed facility in accordance with local regulations in acceptable disposal method.

14. 运输信息 TRANSPORTATION INFORMATION

保持包装完整。防止高温雨淋。

With integrated packing. Keep away with high temperature and raining.

15. 法规信息 REGULATORY INFORMATION

IPC4101B 《刚性及多层印制板用基材规范》

IPC4101B 《Specification for Base Materials for Rigid and Multilayer Printed Boards》

欧盟 《关于在电气电子设备中限制使用某些有害物质指令》(2002/95/EC)

DIRECTIVE 2002/95/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL 《On the Restriction of the use of certain Hazardous Substances in electrical and electronic equipment》

16. 其他信息 OTHER INFORMATION

填表人: 高明

COMPILE BY: Gao Ming

填表时间: 2009年8月19日

DATE: 19 AUG 2009

审核: 沈宗华

CHECK BY: Sam Shen

修改: 无

MODIFICATION: N/A
