

产品安全数据说明书

MATERIAL SAFETY DATA SHEET

1、产品及公司信息 Product and Company Identification

产品名称：厚膜网络电阻器

Product Name: Thick Film Network Resistor

供应商名称：广东风华高新科技股份有限公司端华片式电阻器分公司

Supplier Name: Guangdong Fenghua Advanced Technology(Holding)Co.,Ltd.

Duanhua Chip Resistor Branch Company

地址：中国广东省肇庆市风华路 18 号风华电子城

Address: Fenghua Electronic Industrial City,18th Fenghua Road, Zhaoqing, Guangdong, China

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2、材料成分信息 Composition/Information on Ingredients

化学性质：固体，非化学品

Chemical Character: Solid, not chemical product

CAS 编号：不适用

CAS No: Not applicable

化学成分 Chemical Ingredients:

成分 Materials	CAS No.	Weigh %
三氧化二铝 Aluminum trioxide	1344-28-1	40~45%
氧化镁 Magnesium oxide	1309-48-4	0.6~0.7%
氧化钙 Calcium oxide	1305-78-8	0.2~0.3%
二氧化硅 Silicon dioxide	7631-86-9	1~1.5%
铅系玻璃 Lead Glass	65997-18-4	<0.1%
氧化钌 Ruthenium Dioxide	12036-10-1	<0.1%
钌酸铅 Dilead diruthenium hexaoxide	37194-88-0	<0.1%
银 Silver	7440-22-4	0.5%
钯 Palladium	7440-05-3	<0.1%
环氧树脂 Epoxy Resin	38891-59-7	0.1%
碳黑 carbon black	1333-86-4	0.8~1%
铁 Iron	7439-89-6	28~30%
锡 Sn	7440-31-5	5~6%
铜 Cooper	7440-50-8	<0.1%
无卤混合阻燃剂 Halogen-free hybrid flame retardants	supplier confidentiality	2~2.5%
环氧树脂 Epoxy Resin	1675-54-3	7~8 %
二氧化硅 SiO2	14464-46-1	4~4.5%
固化剂（环氧树脂类） Curing agent (Epoxy resins)	68459-31-4	3~4%

3、危害性信息 Hazards Identification

有害物质分类规定 Hazards Material Classification: 不适用 Not Applicable

理化特性 Physical and Chemical Character: 固体, 非化学品 Solid, not chemical product

人体危害性 Human Health Hazards: 无危害 Not Applicable

环境危害性 Environmental Hazards: 无相关资料 No relevant information found.

4、急救方法 First Aid Measures

此类产品常态下极其稳定, 无刺激性, 一般不需急救。如果感觉不适请求医。

The product is normally stable, no irritant; first aid is not needed generally. If feeling not good, call a physician immediately.

5、消防措施 Fire Fighting Measures

在高温中可能会分解放出有毒气体, 灭火时注意穿戴防烟熏装置, 使用干粉灭火剂灭火。

Since decomposition of component may emit toxic gases in high temperature, we suggest the person must to wear fire smoke prevention device, and use dry chemical fire extinguishing.

6、泄漏应急处理 Accidental Release Measures

此类产品常态下极其稳定, 无毒害性和刺激性, 用扫帚将其扫起来即可。

The product is normally stable, no irritant; sweep with normal broom.

7、操作处置与储存 Handling and Storage

处置 Handling: 无特殊要求, 注意防止潮湿。 No special requirement, control the humidity of storage site.

储存 Storage: 存放在阴凉及通风良好的地方, 避免阳光及潮湿。避免存放于有腐蚀性气体的环境。避免长时间存放。 Store in cool and dark room away from heat, sunshine or dampness. Avoiding storage in place full of corrosive gas. Avoid long time storage.

储存条件 Storage Condition: T:5°C~35°C; RH: 45%~70%.

8、接触控制/个人防护 Exposure Control/Personal Protection

控制参数: 无

Control Parameter: No available.

预防措施: 无需

Prevent Measures: No available.

个人防护设备: 无需特殊设备

Personal Protection: No special equipment.

9、理化特性 Physical and Chemical Properties

外观、化学性质、组成、颜色、气味: 黑色表面带银色金属引脚的固体颗粒, 无气味。

Appearance、Chemical Character、Properties、Color、Odor:

Black surface with silver metal lead solid mixture, no odor.

密度 Density: 无资料 No relevant information found.

沸点 Boiling point :

熔点 Melting point: 78°C(环氧包封料 Epoxy Resin)

挥发性 Volatiles: 无 Not available

水溶性 Solubility in water: 不溶 Not available

人体内溶解性 Solubility in human: 不溶 Not available

10、人体危害性（稳定性及活性） Stability/Reactivity

此类产品常态下极其稳定，无特殊活性。

The product is normally stable, no special mobility.

闪点/燃点：不适用

Flash point /Fire point: Not applicable

暴露上限/下限：不适用

Explosion upper/ lower limits: Not applicable

不相容性：强酸、强碱、强氧化剂

Incompatibility: acid、alkali、oxidant

分解物质：无资料

Decompounded material: No relevant information found.

11、毒理学资料 Toxicological Information

无相关资料。

No relevant information found.

12、生态学资料 Ecological Information

无相关资料

No relevant information found.

13、废弃处置 Disposal Considerations

此类产品含有重金属，废弃时应按危险废弃物处理法规进行处置。

The product contains heavy metal, disposing should be follow the danger and waste regulations.

14、运输信息 Transport Information

运输应按照国家及地方的有关法规执行。

Transportation should be in accordance with state and local environmental regulations.

15、规章制度 Regulatory Information

按照国家及地方法律法规执行。

Follow the state and local regulations.

16、其他信息 Other Information

参考资料：生产商 MSDS 成分资料

Reference information: MSDS provided from material supplier.

声明：

“本 MSDS 说明只作为参考之用。使用者应该按照实际生产情况指导员工操作，并保证适当使用，保护员工健康及安全。本 MSDS 说明没有任何约束力，当产品使用与本 MSDS 说明不相符，或在生产过程中与其他物质不相容时，引起的一切后果将由使用者承担。”

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