

Epoxy Encapsulating Materials

环氧包封料

特点与用途 FEATURES&APPLICATION

HYX-808系列环氧包封料是以环氧树脂、固化剂、颜填料为主要成份，辅以其它添加剂，经过混合、混炼、粉碎、筛分等过程制成的热股型粉末涂料。该产品适用于压敏电阻、陶瓷电容、金属化薄膜电容的流化床涂敷及手工涂敷。涂层具有良好的光泽，附着力强，抗冲击性好、电性能高、耐化学药品性及阻烯性优异。

HYX-808 series epoxy encapsulating materials are made up from epoxy resin, curing agent, fillers along with other additive, through mixing, blending, crushing, Sieving etc. process into powder coating. This product is suitable for VDR, ceramic capacitors, metallized film capacitor painting fluidized bed or by manual. The coating have gloss with strong adhesion, anti-impact ability, excellent electrical property and good chemicals resistance performance.

产品性能 PRODUCT PERFORMANCE

| 序号 | 性能项目 | 单位 | 条件 | 指标 |
|----|---------|-------|--------|---------------|
| 1 | 外观 | - | - | 粉末均匀，无杂质、结块现象 |
| 2 | 颜色 | - | - | 红色 蓝色 黄色 绿色等 |
| 3 | 粒度 | - | - | 140目全通 |
| 4 | 软化温度 | °C | - | 50-80 |
| 5 | 表观密度 | g/ml | - | 0.60-0.90 |
| 6 | 凝胶化时间 | S | 120°C | 180-300 |
| 7 | 流迹长度 | mm | 120°C | 18-40 |
| 8 | 击穿强度 | Kv/mm | A | ≥30 |
| 9 | 体积电阻率 | MΩ.m | A | ≥107 |
| 10 | 表面电阻率 | MΩ | A | ≥109 |
| 11 | 介质损耗角正切 | tgδ | A 1MHz | ≤0.03 |
| 12 | 介电常数 | - | A 1MHz | ≤6 |
| 13 | 阻燃性 | - | A | UL94V-0 |
| 14 | 固化物吸水率 | % | 水煮8h | ≤0.7 |





- 高速混合机 high-speed mixer
- 无间隙挤出机 gapless extruder
- 钢带式压片机 steel tablet press
- 双分离磨粉机 double separation mill
- 筛选机 Screening

使用方法 USING METHOD

- 包封机参数 Over-wrapping machine parameter :
预热15" 流化15" 静粉15" 浸粉6" 流平15" (preheat15" fluidization 15" powder calming 6" levelling15")
- 元件预热温度 Component preheat temperature :
60min/100±2°C
- 包封次数 Over-wrapping times :
2~3次至规定厚度 (2~3times to recommended thickness)
- 预流平 Pre-levelling :
10min/120±5°C
- 固化条件 Cure condition :
室温冷却30min后固化 低温120min/90~100°C 中温120min/140~150°C
30min at room Temperature solidify, low temperature 120min/90~100°C 120min/140~150°C

包装运输贮存 PACKAGING TRANSPORT STORAGE

纸箱包装，内衬聚乙烯内袋，每箱净重15公斤。
Carton Packaging, polypropylene bags inside, Net weight 15kg per carton.

贮存要求 STORAGE REQUIREMENTS

- 包 装：** 本产品采用纸箱包装，内衬两层聚乙烯袋，每箱重15Kg.
- 运 输：** 运输方式：汽运、铁路、海运或空运。
- 运输条件：** 25°C以上40°C以下，运输时间不得超过15天；运输防止雨淋，高温及机械。
- 贮 存：** 以包装形式存放于干燥、清洁的车库内，温度不超过25°C，相对湿度不大于72%。
10°C以下12个月，25°C以下6个月；超过保存期限经性能检验及包封工艺试验，合格者仍可使用。

Packaging: This product packed by cartons with polypropylene bags inside, 15kg/carton

Transport: Bus, rail way, ship or air transport

Transport condition: 25°C~40°C, traveling time will not over 15 days, prevent getting wet in the rain, high temperature .

Storage: Packed and Stored in dry, clean garage, not over 25°C, Relative humidity not over 72%. 12month below 10°C, 6month below 25°C; If exceeding shelf Life and passed property testing again can also be used.

卫生与安全 SANITATION AND SAFETY

粉末材料，无毒产品，在使用过程中应避免吸入粉尘，建议操作人员佩戴好防尘口罩、眼镜。

Powder material, products with no poison, Suggest that workers equipped with anti-dust mask and glass, in order to avoiding powder dust be breathed in.

Metalized Film

金属化薄膜



产品说明 PRODUCT DESCRIPTION

本公司可生产电容器用金属化聚酯和聚丙烯薄膜。
The company production of capacitors with metallized polyester and polypropylene film.

铝金属化聚酯和聚丙烯膜

1、基膜厚度 Basement membrane thickness :

PET: 1.4 μ m~12.0 μ m

OPP: 2.5 μ m~16.0 μ m

厚度偏差 Thickness deviation : $\pm 5\%$

供应厂家 Supply manufacturers :

PET: 美国杜邦/日本东丽/仪化东丽等

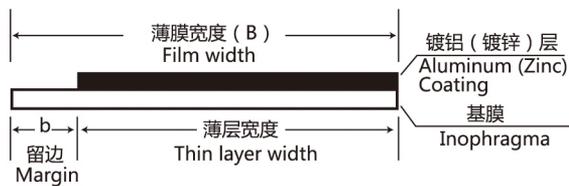
American Dupont/Japan Toray/Yihua Toray

OPP: 德国创斯普/日本东丽芳/广东新会/泉州嘉德力等
(或由需方安排提供厚度及厂家)

Germany treofan/Japan Toray/Canton Xinghui/Quanzhou
Ja De Li (Or customer can provide thickness and factory)

2、单面单边单铝金属化薄膜 :

Single side single aluminum metallized film:



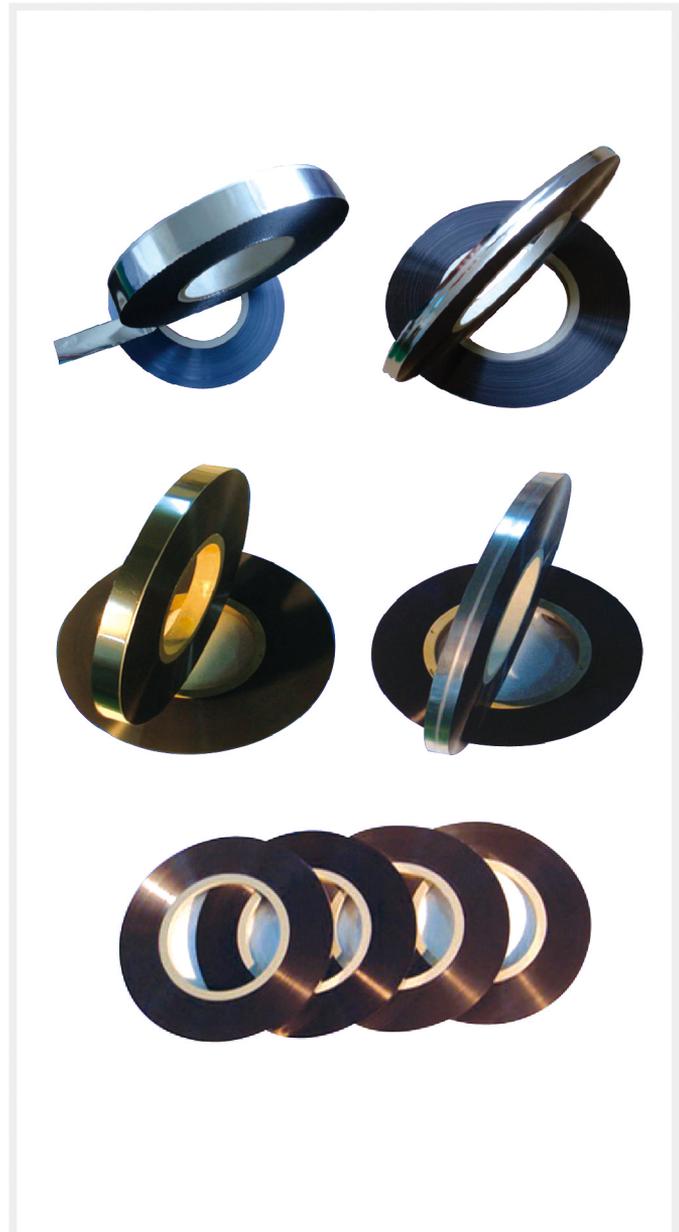
方阻及偏差 : (出厂标准)

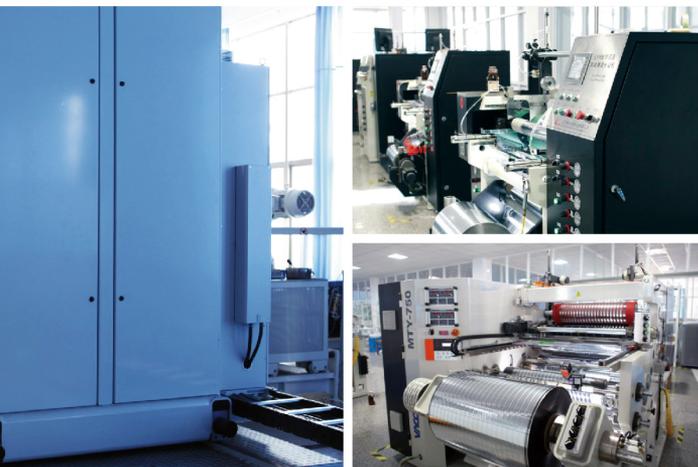
Square resistance and deviation: (standard)

| | | | |
|-------------------------|------------|------------|------------|
| 方阻 Square-resistance | 1.5 | 2.0 | >2.5 |
| 偏差 Tolerance | $\pm 30\%$ | $\pm 30\%$ | $\pm 30\%$ |

设备的设计方阻误差 $\pm 15\%$ (或按客户要求协商)

Equipment design of square resistance error of $\pm 15\%$
(or according to customer request consultation)





引进2台德国高真空、高精度、超薄膜蒸镀机；具有纯铝锌铝、安全膜蒸镀功能。引进韩国高精度、高速度、超薄膜分切机；具有去静电、无接触传动赋能、光电跟踪等功能。共有六台分切机其中能够分切超薄膜、小规格的机型二台。

The introduction of 2 german high vacuum, high precision, thin film evaporation; with pure aluminum zinc aluminum, security film evaporation function. The introduction of korean high accuracy, high speed, ultra thin film cutting machine; having the function of removing electrostatic, non-contact transmission empowerment and photoelectric tracking. A total of six cutting machine, two of which are small size and can cut thin film.

金属化薄膜

Metalized Film

产品型号 PRODUCT MODEL

| 序号 | 基材 | 产品名称 | 产品型号 |
|----|----------------------|---------------------|---------|
| 1 | 聚丙烯 (BOPP) | 单面单留边锌铝金属化边缘加厚聚丙烯膜 | ZAPH-S |
| 2 | | 单面单留边锌铝金属化聚丙烯膜 | ZAP-S |
| 3 | | 单面单留边铝金属化锌边缘加厚聚丙烯膜 | APZH-S |
| 4 | | 单面单留边铝金属化聚丙烯膜 | AP-S |
| 5 | | 单面中留边铝金属化聚丙烯膜 | AP-M |
| | | 单面双留边铝金属化聚丙烯膜 | AP-T |
| 6 | | 单面锌铝金属化边缘加厚聚丙烯网状安全膜 | ZAPFH-S |
| 7 | 单面锌铝金属化边缘加厚聚丙烯TD型安全膜 | ZAPH-TD | |
| 8 | 聚酯 (PET) | 单面单留边铝金属化聚酯膜 | AT-S |
| 9 | | 单面单留边锌铝金属化边缘加厚聚酯膜 | ZATH-S |
| 10 | | 单面单留边铝金属化锌边缘加厚聚酯膜 | ATZH-S |
| 11 | | 单面中留边铝金属化聚酯膜 | AT-M |
| | | 单面双留边铝金属化聚酯膜 | AT-T |
| 12 | | 单面三串式留边铝金属化聚酯膜 | AT-R |
| 13 | | 单面四串式留边铝金属化聚酯膜 | AT-V |
| 14 | | 双面中留边铝金属化聚酯膜 | ATD-M |
| 15 | | 双面三串式留边铝金属化聚酯膜 | ATD-R |
| 16 | | 单面铝金属化聚酯网状安全膜 | ATF-S |
| 17 | 单面锌铝金属化聚酯边缘加厚TD型安全膜 | ATH-TD | |

薄膜宽度和留边的允许偏差

Film width and margin of the allowable deviation

| 薄膜宽度(B)及允许偏差(mm) | | 留边宽度(b)及允许偏差(mm) | |
|----------------------|------------|---------------------|------------|
| $B \leq 6.4$ | ± 0.1 | $b \leq 0.25$ | ± 0.10 |
| $6.4 < B \leq 12.0$ | ± 0.15 | $0.25 < b \leq 1.0$ | ± 0.15 |
| $12 < B \leq 35.0$ | ± 0.2 | $1.0 < b \leq 2.0$ | ± 0.20 |
| $35.0 < B \leq 75.0$ | ± 0.3 | $2.0 < b \leq 4.0$ | ± 0.30 |
| > 75.0 | ± 0.4 | > 4.0 | ± 0.30 |

说明：我公司目前可分切规格尺寸为膜盘最窄宽度4mm；且以最小0.5mm的尺寸递增。

Note: my company can cut size specifications for diaphragm narrowest width 4mm; and with a minimum of 0.5mm size increments.

规格 SPECIFICATIONS

| 分切宽度(mm) | 屏蔽带宽度(mm) | 分切宽度(mm) | 屏蔽带宽度(mm) |
|----------|-----------|----------|-----------|
| 4.5 | 0.5 | 29.0 | 1.0 |
| 6.5 | 1.0 | 35.0 | 2.0 |
| 7.0 | 0.4 | 37.5 | 2.0 |
| 9.0 | 0.5 | 40.0 | 2.5 |
| 9.5 | 1.5 | 75.0 | 2.0 |
| 10.0 | 2.0 | 100.0 | 2.5 |
| 12.0 | 2.0 | 4.5 | 0.4 |
| 14.0 | 1.0 | 5.0 | 0.4 |
| 15.0 | 0.5 | 6.5 | 0.5 |
| 18.0 | 1.5 | 7.0 | 0.7 |
| 19.0 | 1.5 | 7.0 | 1.0 |
| 20.0 | 3.0 | 6.0 | 6.8 x 0.8 |
| 24.0 | 1.0 | 9.5 | 2.0 |
| 24x2 | 1.0 | 10.0 | 1.0 |
| 25.0 | 2.0 | 13.0 | 1.5 |
| 26.0 | 2.0 | 14.0 | 2.0 |
| 35.0 | 1.5 | 16.0 | 1.0 |
| 35.0 | 2.5 | 19.0 | 1.0 |
| 40.0 | 2.0 | 20.0 | 1.5 |
| 60.0 | 2.5 | 21.0 | 2.0 |
| 95.0 | 1.5 | 25.0 | 1.5 |
| 4.5 | 0.3 | 26.0 | 1.5 |
| 4.5 | 1.0 | 30.0 | 2.0 |
| 6.5 | 0.5 | 35.0 | 2.0 |
| 7.0 | 0.5 | 40.0 | 1.5 |
| 7.0 | 2.0 | 50.0 | 1.5 |
| 9.0 | 1.0 | 75.0 | 2.5 |
| 9.0 | 2.0 | 110.0 | 2.5 |
| 10.0 | 0.5 | 7.5 | 双0.7 |
| 13.0 | 1.0 | 9.0 | 双1.0 |
| 14.0 | 1.5 | 9.5 | 双1.0 |
| 15.0 | 2.0 | 9.5 | 双1.0 |
| 19.0 | 0.5 | 6.0 | 双0.7 |
| 19.0 | 2.0 | 5.0 | 双0.7 |
| 21.0 | 1.5 | 9.0 | 双1.2 |
| 24.0 | 1.5 | 9.0 | 三串 |
| 25.0 | 2.5 | 14.0 | 三串 |