水性导电加热涂料产品说明书
Water-based Conductive Coating Product Specification

1. 产品描述(DESCRIPTION)

水性导电加热涂料是由水溶性树脂、碳纳米材料、表面活性剂及助剂加工分散而成。产品以碳纳米材料作为发热媒，充分利用碳纳米材料导电性能好、传热性能优越、远红外功能突出、机械强度大、韧性好等方面的突出优势，借助分子结构设计技术，把碳纳米材料植入到水性高分子树脂结构中，形成了水性导电发热涂料，将纳米技术与功能材料相结合，具有环保性、导电性、导热性等特点。

Water-based conductive coating is prepared by rationally blending water-based resin, carbon nano-material, surfactant and other additives. The product employs carbon nanomaterial as the heating medium with the purpose of making full use of the outstanding advantages of electrical conductivity, such as high heat- transfer rate, far infrared functional protrusion, high mechanical strength, good toughness and other aspects. Carbon nanomaterial is implanted into the matrix of water-soluble high molecular resin by means of molecular structure design technology in this process. Combined Nanotechnology with functional material, as prepared water-based conductive heating coating is environment-friendly with high electrical conductivity, thermal conductivity, etc.

2. 产品型号及性能(PROPERTY)

型号	外观	密度/g/cm^3	粘度 /cp	附着力 /级	细度 /μm	体积电阻率 /Ω·cm	涂装方式
WBCC	黑色液体	1.02	500~1500	1	≤5	10^{-1}~10^{1}	喷涂、刷涂

Type	Appearance	Density /g/cm^3	Viscosity /cp	Adhesion / degree	Fineness /μm	Mass resistivity/Ω·cm	Coating method
WBCC	Black liquid	1.02	500~1500	1	≤5	10^{-1}~10^{1}	spray

3. 产品特点（ CHARACTERSTIC ）

(1) 绿色环保，产品以水性树脂作为主要成膜物质，无溶剂，无VOC，无环境污染，有利于生

产人员健康。

Green, free-solvent water-based resin as the main film-forming element is used. It does not emit VOC and pollution of the environment.

(2) 导电性优异，产品采用碳纳米材料作为导电填料，电阻小、导电性能优异。

Excellent electrical conductivity.

(3) 远红外辐射，波长范围在7.5~13μm，被称为“生命光线”，具有保健功能。

Emitting far infrared ray in a wavelength range of 7.5~13μm.

(4) 优异的附着力，在环氧玻璃纤维板、PET膜、玻璃、陶瓷基材上具有优异的附着力和涂刷性能。

Excellent adhesion with poxy glass fiber board, PET, glass and ceramic substrate.

(5) 耐热性优异，产品电阻变化率小于10%。

Rate of resistance change less than 10%.

(6) 使用寿命长，产品固化后性能稳定，功率稳定，，发热均匀。

Long-term, stable performance, and uniform heating after curing.

4. 应用领域 (APPLICATION)

远红外电热膜、红外取暖器、远红外电热壁画、孵化器、电热毯、除雾镜等。

Widely applicable in electric heating products such as low temperature radiation electric heating film, far infrared electric blanket, heating plate, and defogging mirror.

5. 使用说明 (INSTRUCTION)

(1)基材必须认真处理，去污、去油、否则会影响实际使用效果。

Decontaminated and degreased substrate is preferred, otherwise it affects the actual use.

(2)固化工艺（推荐）：120℃，10min；但固化温度可以为常温，也可以在50℃~120℃范围内固化，固化时间根据固化温度的提高而缩短。

Suggested Cure condition: 120℃ , 10min.

(3)涂布面积用量：0.15kg~0.20kg/m^2每干膜厚25μm。

Weight amount per dry film thickness of 25μm about 0.15kg-0.20kg/m2.

(4)清洗：采用水清洗即可。

Water washing available.

6. 包装 (PACKAGE)

5kg/桶、20kg/桶。

5 kg/bucket、20 kg/bucket

7. 储存 (STORAGE)

产品在5~25℃条件下储存，保持产品性能稳定，避免阳光直接照射，远离热气、火源，于阴凉、干燥、通风处贮存密封原装保存可保存6个月。

Products should be stored at 5-25℃, avoiding direct sunlight, heat and fire.

It can be originally preserved for more than 6 months in a cool, dry and ventilated storage place.