

Product Technical Sheet

Product EMI PES Polyether sulfone ultrafine powder

Appearance fine powder natural colour

Introduction EMI PES an amorphous high-temperature resistant specialized plastic with hydroxyl groups at the end, enabling a higher glass transition temperature. Good adhesion with stainless steel, aluminum and other metals, increase the hardness of the coating surface, etc., and can be used in coating systems such as chemical anticorrosion and cookware non-stick coating. It will increase the tensile strength in thermosetting carbon fiber system.

【Features】

- ◆ higher glass transition temperature: $T_g=225^{\circ}\text{C}$
- ◆ Excellent toughness and excellent hydrolysis resistance.
- ◆ Excellent steam, boiling water and acid resistance
- ◆ Excellent long-term thermal stability, long-term use temperature of $200\sim 220^{\circ}\text{C}$
- ◆ Excellent metal adhesion, formability and excellent flame retardancy.

【application】

Recommended for non-stick coating systems and other high-temperature coating formulations and special adhesives. The applicable substrates are metal, glass, ceramics, etc. It is recommended increase the tensile strength of composites in thermosetting carbon fiber system.

【Specifications】

Items	Product Name			
	EMI PES-MP20	EMI PES-MP40	EMI PES-MP60	EMI PES-MP80
particle size D50 (um)	20 ± 2	40 ± 2	60 ± 2	80 ± 2
Tg ($^{\circ}\text{C}$)	225	225	225	225
Bulk Density (g/cm ³)	0.30~0.40	0.30~0.40	0.30~0.40	0.30~0.40

【FDA declare】

PES-MP20G can be used in coating systems for food contact, which conforms to FDA regulation 21 CFR 177.2440 and German BFR recommendations.(subject to complete curing of surface with out presence of non-volatile solvents).

【Packaging】

10 kg/Carton, PE inner lining

【Storage】

store in clean and dry condition, away from dust and moisture.

THE INFORMATION CONTAINED IN THIS BROCHURE IS AN ACCURATE DESCRIPTION OF THE TYPICAL CHARACTERISTICS AND/OR USES OF THE PRODUCT OR PRODUCTS, BUT IT IS THE CUSTOMER'S RESPONSIBILITY TO THOROUGHLY TEST THE PRODUCT IN EACH SPECIFIC APPLICATION TO DETERMINE ITS PERFORMANCE, EFFICACY AND SAFETY FOR EACH END-USE PRODUCT, DEVICE OR OTHER APPLICATION. SUGGESTIONS OF USES SHOULD NOT BE TAKEN AS INDUCEMENTS

Typical Properties

Typical values for uncoloured product at 23 °C ¹⁾	Test method	Unit	Values ²⁾
Properties			
Polymer abbreviation	-	-	PESU
Viscosity number (in 0,01 g/ml Phenol/1,2, ortho-Dichlorbenzol, 1:1)	ISO 307, 1157, 1628	cm ³ /g	59
Moisture absorption, equilibrium 23°C/50% r.h.	similar to ISO 62	%	1.00
Apparent density	ISO 60	g/cm ³	0.3
Molecular weights			
Molecular weight Mw (GPC in DMAc, PMMA standard)	-	g/mol	55000
Mw/Mn (GPC in DMAc, PMMA standard)	-	-	2.7

