

GREENSTAR EPOXY RESIN

ECP-100 GN

Epoxy Coating Powder resin for
Capacitor, HIC & Electronic Part

GREENSTAR Co.,LTD.

Specification No : CB14001AA

1. INTRODUCTION

ECP-100 GN Epoxy coating powder is designed for insulation coating of electronic part such as Film Capacitor(PET & PP), HIC, etc.

It can be used in fluidized bed coating method. As furthermore, it can simplify your manufacturing process and reduce total insulation cost. ECP-100 GN provide good appearance, improve physical & chemical properties.

2. CHARACTERISTICS OF ECP-100 GN

2-1. Characteristics

- * Excellent powder fluidization
- * Outstanding moisture protection
- * Improvement of electrical properties & chemical resistance
- * Good flame retardancy(UL 94V-0 approved)
- * Good thermal resistance
- * Good workability and high productivity
 - lower preheat temperature
 - short preheat time
 - short dip time
- * Good storage stability

2-2. Application

Product	Application	Coating method
ECP-100 GN	Film capacitor(PET/PP)	Fluidized bed coating

2-3. Typical properties of ECP-100 GN

1) Powder Property

Property	Condition	Unit	SPEC	Test method
Color	-	-	Light-green	SMP-1
Gel time	150℃	sec	110 ± 40	SMP-2
Plate flow	150℃, 1g, 60°	mm	50 ± 30	SMP-3
Melting point	DSC	℃	44 ± 5	SMP-4
Particle size	150 μm on	%	2 ↓	SMP-5
	25 μm pass		20 ↓	
SHELF LIFE	15 ℃ ↓	month	4-6	
	25 ℃		3	
Bulk density		g/cc	0.75 ± 0.05	SMP-6

2) Cured Property

Property	Condition	Unit	SPEC	Test method
Tg	-	℃	90 ↑	DSC
Water absorption	deposition,24hr	wt.%	0.5 ↓	JIS K-6911
Flammability	-	-	V-0(E108437)	UL - 94
Dielectric strength	25℃	KV/mm	20 ↑	JIS K-6911
Dielectric constant	25℃,1kHz	-	4 ↓	JIS K-6911
Dissipation factor	25℃,1kHz	-	0.005	JIS K-6911
Volume resistivity	25℃	Ω cm	1×10 ¹⁵ ↑	JIS K-6911

3. Curing condition

$75\pm 5^{\circ}\text{C} \times 30\sim 40 \text{ min} + 105^{\circ}\text{C}/110^{\circ}\text{C} \times 90 \text{ min} \uparrow$

4. PRECAUTIONS

- 1) Do not get in eyes, on skin, on clothing.
- 2) Avoid breathing dust. Using well filtering dust mask.
- 3) Use with good Ventilation.
- 4) In case of contact
 - Eyes : Immediately flush eyes with water for at least 15min. Call a physician.
 - Skin : Wash thoroughly with mild soap and water.

6. STORAGE

ECP-100 GN series epoxy coating powder is recommended to store at 15°C or below. Long term storage at high temperature and humidity may cause sintering and shortening their flow & gel time.

It is recommended that material which has been stored in cold refrigerator, Be allowed to warm up to ambient temperature before opening the package (pail or carton box) in order to avoid possible moisture adsorption.