

HSINSOU NYPAS

A Permanent Anti-Static Agent for Styrene Resins

HSINSOU NYPAS mainly provide ABS and HIPS or other styrene resins the character of permanent anti-static property. Its chemical structure composed of hydrophilic and hydrophobic segments, In order to keep the mechanical property of each styrene and cause permanent anti-static character by its hydrophilic segments.

1. Typical Properties

	Values	Remarks
Appearance	Pale yellow Pellet	
Melt flow rate	0.98 / 10 min	10 min. ASTM D 1238
		(190 °C , 21.18 N)
Surface resistivity	$10^6 \sim 10^7 \Omega$	ASTM D257 ,25 ℃ , RH 55%
Thermal degradation	289 ℃	Start to degradation
Temperature (Nitrogen)		

PS. The lowest temperature at which HSINSOU NYPAS begins thermsly to degrade. (measured under air atmosphere with a thermal gravimeter)

2. Character

- 1. Causing the permanent anti-static property to styrene resins
- 2. Injected parts will still show original anti-static abilities after many times water washing as per suitable process to compound styrene resins with HSINSOU NYPAS in proper ratio ,HSINSOU NYPAS gives the styrene resins a permanent

antistatic property.

- 3. Slightly influences to mechanical property of styrene resins .
- 4. Superior heat stable ability ,thus less influences to styrene resins in heat applications .
- 5. Suitable for I C relative products and other easily hurting of sensitive in static environment.

3. Application Method

1). General procedure

As shown in figure 1 .HSINSOU NYPAS and styrene resin are recommend process as following: . Pigment may be added as necessary during the dry-blending process or the neading process

dry-blended using a blender, such as tumble, and are neaded and pelletized using a twin screw extruder.

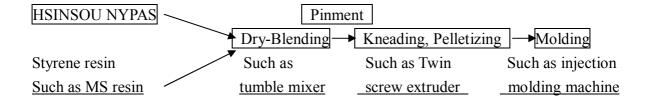


Figure 1. General procedure for application of PLEASTAT NC 7530

2.Amount to be Applied

ABS : As per previous process, 20 % NYPAS to be added HIPS : As per previous process, 15 % NYPAS to be added

3. Kneading Conditions

- 1. Use a high share rate kneader , such as a twin screw extruder .
- 2. Standard kneading temperature is between 160 $^{\circ}$ C \sim 170 $^{\circ}$ C , Determine the kneading temperature according to the resin applied .
- 3. The Highest process Temperature for each different facility are around 200 $^{\circ}$ C \sim 210

 $^{\circ}\text{C}\,$.As lower as possible while process NYPAS into extruder ,recommend process in between 150 $^{\circ}\text{C}\,$ to 170 $^{\circ}\text{C}\,$.

- 4. Other resin undetermined need to have more confirmation
- 5. Drying of HSINSOU NYPAS

4. Drying

HSINSOU NYPAS has some hygroscopic character, but is packed in bags under moisture proof conditions; no drying is necessary when used just after unsealing. If HSINSOU NYPAS is kept open for a long time (about 72 hours), after unsealing, drying is necessary

5.Performance Tests

With refer to the extended test of ABS and HIPS, it show the absolutely superior permanent—anti-static property, to other low molecule weight of anti-static materials.

NOTE:

Before handling this material, please refer to the guide brochure, Further more technical request, please contact to Hsinsou Technical Department.