Longcester® LC-TGIC

Tris(2,3-epoxy Propyl) Isocyanurate

General Description

LC-TGIC is a widely used in polyester powder coatings, Plastic and Rubber adhesive additives.

· Molecular Formula:C12H15N3O6

· Molecular Weight:297

· High Cross-Linking Density with excellent heat resistance

· Low chlorine contents,inhibit deterioration and electrolytic corrosion

Extrusion & Application Conditions

Extruder:	Lingyu SLJ-20
Zone I temp.:	85~105℃
Zone II temp.:	100~120℃
Screw speed:	400~500rpm
Panel:	0.5mm pre-treated cold-rolled steel
Spray gun:	Lingyu JP-80
Voltage:	60~90kV
Curing cycles:	15 min. @ 180℃

Packaging

· White PE bag, N.W.25kg/bag

Storage

The product can be stably stored for at least one year when kept in closed containers in a dry place at temperature below 30℃. Avoid exposure to direct sunlight.

Product Specifications

Property	Range	Test Method
Appearance	White granules	Visual
Epoxy equivalent [g/eq]	<110	ISO 3001
Melting Range (℃)	90~125	ISO11357-1
Chlorine content	<1.5%	VTM116
Volatile Matter	<1.0%	
Epichlorohydrin	<100ppm	VTM347
Density g/cm3	1.46	ISO 8130-3
Flashing point(℃)	>200	ISO 2592

Starting Formulation

Component	Weight
Longcester® P 5706	300.0
LC-TGIC	23.0
Titanium dioxide	150.0
LC-88 Flow agent	5.0
Benzoin	3.0

Film Properties

Item	Result	Test Method
Film thickness, μm	approx. 60	ASTM D1186
Gloss @ 60°, %	min. 90	ASTM D523
Direct/reverse impact, inch lbs	160/160	ASTM D2794
1/8" Conical mandrel	pass	ASTM D522
Adhesion(cross cut)	5B	ASTM D3359
Pencil hardness（Mar）	H	ISO 15184-98