Ecomann® Bioresin EM40010

Polyhydroxyalkanoate

Shenzhen Ecomann Biotechnology Co., Ltd.

Message:

EM40010 is semi-crystalline biodegradable, aliphatic bio-polyester designed for use in sheet applications. EM40010 is PHA base compound with PLA, minerals and some additives.

EM40010 is certificated to meet EN13432 & ASTM D6400 standards for biodegradable plastics. Typical applications: Cosmetics packaging, credit cards, thermoforming sheet

General Information					
Filler / Reinforcement	Mineral				
Additive	Unspecified Additive				
Features	Aliphatic				
	Biodegradable				
	Compostable				
	Good Colorability				
	Good Processability				
	High Gloss				
	High Stiffness				
	Medium Heat Resistance				
	Moisture Resistant				
	Recyclable Material				
	Semi Crystalline				
Uses	Cosmetic Packaging				
	Sheet				
	Thermoforming Applications				
Agency Ratings	ASTM D 6400				
	EN 13432				
Forms	Pellets				
Processing Method	Sheet Extrusion				
Physical	Nominal Value	Unit	Test Method		
Specific Gravity	1.32	g/cm ³	ASTM D792		
Melt Mass-Flow Rate (MFR) (170°C/2.16					
kg)	4.0	g/10 min	ASTM D1238		
Water Absorption (Equilibrium)	< 0.40	%	ASTM D570		
Mechanical	Nominal Value	Unit	Test Method		
Tensile Strength	30.0	МРа	ASTM D638		
Tensile Elongation (Break)	5.0	%	ASTM D638		

Flexural Modulus1400MPaASTM D790ImpactNominal ValueUnitTest MethodUnnotched Izod Impact (Area)3.00k/m²ASTM D256ThermalNominal ValueUnitTest MethodVicat Softening Temperature105°CASTM D1525 ¹ Melting Temperature140 to 160°CDSCOpticalNominal ValueUnitTest MethodOpticalNominal ValueUnitTest MethodYellowness Index50YlInternal MethodDyring Temperature80.0°CTest MethodDyring Time3.0rCTest MethodCylinder Zone 1 Temp.145 to 155°CTest MethodCylinder Zone 5 Temp.150 to 160°CTest MethodDie Temperature150 to 165°CTest MethodDie Temperature150 to 165Test Met					
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Cylinder Zone 3 Temp.150 to 160°CCylinder Zone 5 Temp.150 to 165°CDie Temperature155 to 165°CNOTE	Drying Time	3.0	hr		
Cylinder Zone 5 Temp. 150 to 165 °C Die Temperature 155 to 165 °C NOTE	Cylinder Zone 1 Temp.	145 to 155	°C		
Die Temperature 155 to 165 °C NOTE	Cylinder Zone 3 Temp.	150 to 160	°C		
NOTE	Cylinder Zone 5 Temp.	150 to 165	°C		
	Die Temperature	155 to 165	°C		
1. Rate B (120°C/h), Loading 1 (10 N)	NOTE				
	1.	Rate B (120°C/h), Loading	Rate B (120°C/h), Loading 1 (10 N)		

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