

# 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		
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 <sup>3</sup>	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	MPa	ASTM D638
Tensile Elongation (Break)	5.0	%	ASTM D638

Flexural Modulus	1400	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Unnotched Izod Impact (Area)	3.00	kJ/m <sup>2</sup>	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Vicat Softening Temperature	105	°C	ASTM D1525 <sup>1</sup>
Melting Temperature	140 to 160	°C	DSC
Optical	Nominal Value	Unit	Test Method
Yellowness Index	50	YI	Internal Method
Extrusion	Nominal Value	Unit	
Drying Temperature	80.0	°C	
Drying Time	3.0	hr	
Cylinder Zone 1 Temp.	145 to 155	°C	
Cylinder Zone 3 Temp.	150 to 160	°C	
Cylinder Zone 5 Temp.	150 to 165	°C	
Die Temperature	155 to 165	°C	
NOTE			

1. Rate B (120°C/h), Loading 1 (10 N)

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#### Recommended distributors for this material

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