

Ecomann® Bioresin EM10040

Polyhydroxyalkanoate

Shenzhen Ecomann Biotechnology Co., Ltd.

Message:

EM10040 is semi-crystalline biodegradable, aliphatic bio-polyester designed for use in coating applications. EM10040 is PHA base compound with some bio-polyester and additives.

EM10040 meets USFDA and EU direct food contact and OK compost and OK Home compost requirements.

Typical applications: Paper coating, composite packaging

General Information			
Additive	Unspecified Additive		
Features	Aliphatic		
	Biodegradable		
	Compostable		
	Excellent Printability		
	Food Contact Acceptable		
	Good Adhesion		
	Good Heat Seal		
	Good Processability		
	Moisture Barrier		
	Moisture Resistant		
	Oxygen Barrier		
	Recyclable Material		
	Semi Crystalline		
Uses	Film		
	Packaging		
	Paper Coatings		
Agency Ratings	EU Food Contact, Unspecified Rating		
	FDA Food Contact, Unspecified Rating		
Forms	Pellets		
Processing Method	Extrusion		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.24	g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (170°C/2.16 kg)	6.0	g/10 min	ASTM D1238
Water Absorption (Equilibrium)	< 0.40	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	20.0	MPa	ASTM D638

Tensile Elongation (Break)	200	%	ASTM D638
Films	Nominal Value	Unit	Test Method
Oxygen Transmission Rate (40°C, 90% RH, 40 µm)	400	cm ³ /m ² /24 hr	
Water Vapor Transmission Rate (25°C, 90% RH, 40 µm)	36	g/m ² /24 hr	
Thermal	Nominal Value	Unit	Test Method
Vicat Softening Temperature	100	°C	ASTM D1525 ¹
Melting Temperature	130 to 150	°C	DSC
Optical	Nominal Value	Unit	Test Method
Yellowness Index	60	YI	Internal Method
Extrusion	Nominal Value	Unit	
Drying Temperature	80.0	°C	
Drying Time	3.0	hr	
Cylinder Zone 1 Temp.	100 to 115	°C	
Cylinder Zone 3 Temp.	140 to 155	°C	
Cylinder Zone 5 Temp.	160 to 175	°C	
Die Temperature	180 to 195	°C	
NOTE			

1. Rate B (120°C/h), Loading 1 (10 N)

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

