

# Ecomann® PHA EM50000

Polyhydroxyalkanoate

Shenzhen Ecomann Biotechnology Co., Ltd.

## Message:

EM50000 is semi-crystalline biodegradable, aliphatic bio-polyester designed for use in elastomer applications. EM50000 is PHA based compound with some additives.  
Ecomann EM50000 meets USFDA and EU direct food contact and OK compost and OK Home compost requirements.  
Typical applications: Pen cap, replace soft PVC, TPU, and thermo plastic elastomer

General Information			
Additive	Unspecified Additive		
Features	Aliphatic		
	Barrier Resin		
	Biodegradable		
	Compostable		
	Food Contact Acceptable		
	Good Flexibility		
	High Gloss		
	Moisture Resistant		
	Recyclable Material		
	Semi Crystalline		
Agency Ratings	EU Food Contact, Unspecified Rating		
	FDA Food Contact, Unspecified Rating		
Forms	Pellets		
Processing Method	Injection Molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.22	g/cm <sup>3</sup>	ASTM D792
Melt Mass-Flow Rate (MFR) (170°C/2.16 kg)	2.0	g/10 min	ASTM D1238
Water Absorption (Equilibrium)	< 0.40	%	ASTM D570
Hardness	Nominal Value	Unit	Test Method
Shore Hardness (Shore D)	45		ISO 868
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	9.00	MPa	ASTM D638
Tensile Elongation (Break)	800	%	ASTM D638
Impact	Nominal Value	Unit	Test Method
Unnotched Izod Impact (Area)	No Break		ASTM D256
Thermal	Nominal Value	Unit	Test Method
Vicat Softening Temperature	75.0	°C	ASTM D1525 <sup>1</sup>

Melting Temperature	110 to 130	°C	DSC
Optical	Nominal Value	Unit	Test Method
Yellowness Index	75	YI	Internal Method
Injection	Nominal Value	Unit	
Drying Temperature	60.0	°C	
Drying Time	3.0	hr	
Rear Temperature	115 to 125	°C	
Middle Temperature	120 to 130	°C	
Front Temperature	130 to 135	°C	
Nozzle Temperature	130 to 135	°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

