



Greener Polymers Bio Composite Materials

PRODUCT DATA SHEET

Product Reference: **EcoVid - 43TFH**

Description

EcoVid-43TFH is a General Purpose Ingeo PLA and bio-composite material blend suitable for Thermoforming processes with a High Heat resistance index. The material, rated for 178F/80°C and could be frozen to -32°C. Mould crystallization will increase the heat deflection from 80°C to 110°C+ depending on the application.

Applications

Composition: Ingeo PLA content with bio-degradable and compostable HDT additives.

Applications: **EcoVid-43TFH** is suitable for Thermoformed Hot coffee cups, soup bowls, noodle bowls, hot food platters and trays, processed food in containers to be reheated, etc.

For additional information and properties associated with particular applications please refer to Customer and Technical Services info@greenerpolymers.com.

Typical Properties

Physical	Nominal Values	Test Method(s)
Density	1.27 gr/cm ³	ASTM D792
Melt Flow Rate	(190°C/2.16kg) 6 gr/10 min	ASTM D1238
Vapour Barrier Transmission rate	20.1636 (sd +/- 0.3537)	ASTM E380
Oxygen Permeability	53.481 (sd +/- 0.249)	ASTM E380

Thermal	Nominal Values	Test Method
Melting Point (DSC)	130-180°C	ASTM D3418
Vicat Softening Point	130°C	ASTM D1525

Physical Properties

Specific gravity	1.27		D792
Melt flow 6g/10 min (210C. 2.16Kg)	6		D1238
Relative viscosity	2.5		
Crystalline melt temperature	155 - 170		D3418
Glass transition temperature	55-60		D3418
Clarity	NIL		

Mechanical Properties			
Tensile yield strength.psi (Mpa)	9,000(62)		D638
Tensile elongation %	3.5		D638
Notched izod impact ft-lb/in (j/m)	0.3(16)		D256
Flexural Strength (Mpa)	(15,700) 108		D790
Heat distortion temperature	80 - 110C+		E2092

Processing Guidelines	
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ZONE	Temperature Settings C
Feed Throat	145 - 155°C
Feed Section	145 - 165°C
Compression Section	165 - 195°C
Metering Section	165 - 195°C
Die	165 - 180°C
Screw Speed	35 -65 rpm
Back pressure	150 – 400 psi
Mould Shrinkage	0.004 in/in ± 0.001
Mould Cycle Time	19-35 secs

Safety and Handling A Product Safety Bulletin/Material Data Safety Sheet is available from your Greener Polymers representative.

Please refer to Material Safety Data Sheet before using this product.

Customer Service: Greener Polymers Inc, Email: info @greenerpolymers.com
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Temperatures are provided as a guideline and may need to be adjusted according to specific equipment and loading percentages.

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