Greener Polymers Bio Composite Materials

PRODUCT DATA SHEET

Product Reference: Eco*Vid* - 80TFH

Description

Eco*Vid*-80TFH is a blend for thermoforming processes involving thin walled material 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: **Eco*Vid*-80TFH** is a Thermoforming blend suitable lids for hot coffee cups.
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/cm³	ASTM D792
Melt Flow Rate	(190ºC/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		
Crystaline 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

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
Tel: +44 (0)1492 550305 (UK)

DISCLAIMER

GREENERPOL LTD, 1st Floor, 264 Manchester Road, Warrington, WA1 3RB, UK, greenerpolymers@gmail.com
GREENER POLYMERS Inc. 5056 NW 66 Lane, Coral Springs, FL 33067, USA, (954) 340-2427 greenerpolymers@gmail.com