POLYEARTHYLENE

TECHNICAL DATA SHEET

PRODUCT: PEL TH 237

Renewable Content	
Biobased Content (%) (ASTM D6866)	77

PRODUCT DESCRIPTION: This is a biobased, extrusion grade of PolyEarthylene tailored specifically for thermoforming, sheet extrusion, and extrusion blow molding applications. All data presented has been analyzed in accordance with ASTM standards. This material is FDA Title-21 Food Contact Compliant. The biodegradation timeline for this material is approximately 3-5 years.

CHARACTERISTIC	TEST METHOD	VALUE	UNIT
MELT FLOW INDEX	ASTM D1238	0.43	g/10 min (190 °C, 2.16Kg)
SPECIFIC GRAVITY	ASTM D792	1.132	g/cm^3
HARDNESS (SHORE D)	ASTM D2240	81	N/A
TENSILE STRENGTH (@YIELD)	ASTM D638	2792	Psi
TENSILE STRENGTH (@BREAK)	ASTM D638	2074	Psi
TENSILE ELONGATION	ASTM D638	12.8	%
FLEXURAL MODULUS	ASTM D790	92171	Psi
FLEXURAL STRENGTH	ASTM D790	2658	Psi
IZOD IMPACT STRENGTH (NOTCH 1/8" SPECIMEN)	ASTM D256	0.866	Ft-lb/in (73 °F)

Processing Conditions:

PolyEarthylene resins can be processed with conventional extrusion equipment. The addition of this resin should be performed after a standard purging process. The melt temperature of the resin should be kept below 450 °F, if possible.

Every manufacturing process is different and the temperature ranges for extrusion molding presented in the table are only suggested by Verde Bioresins, Inc.

Modifications to operational parameters may be required for some equipment. Any questions related to the material can be addressed to Verde Bioresins, Inc.

Extrusion / Thermoforming:

Description of Temperature Zone	Temperatures (Range Value)
Feed	100-200°F
Barrel	330-370°F
Die Head	330-360°F

Blow Molding:

Description of Temperature Zone	Temperatures (Range Value)
Zone #1	325-345 °F
Zone #2	325-345 °F
Die Head	325-345 °F

Packaging and Storing:

This resin is packaged in a sealed, foil lined gaylord or bag. The product should be stored in a cool, dry, and isolated area away from moisture and other contaminants to achieve maximum stability and performance.

Notes:

Data are obtained from specimens molded under carefully controlled conditions from representative samples of the compound described herein. Properties may be materially affected by the molding techniques applied and by the size and shape of the item molded. No assurance can be implied that all molded articles will have the same properties as those listed. This data is not based on the minimum quantity of results required to report as qualifying specifications and may be subject to refinement. Data herein is typical and not to be construed as specifications.