PolyEarthylene®

TECHNICAL DATA SHEET

Verde BIORESINS

PRODUCT: PEL FZ 311

Renewable Content	
Biobased Content (%) (ASTM D6866)	>50%

PRODUCT DESCRIPTION: PEL-FZ-311 is an LLDPE Blown film grade of PolyEarthylene® with a biobased content of about 50%. It is designed specifically for high strength and puncture resistance applications. All data presented has been analyzed in accordance with ASTM standards. This material is FDA Title-21 Food Contact Compliant and California Prop. 65 compliant. The biodegradation timeline for this material is approximately 3-5 years.

CHARACTERISTIC	TEST METHOD	VALUE	UNIT
MELT FLOW INDEX	ASTM D1238	0.76	g/10 min (190°C, 2.16Kg)
SPECIFIC GRAVITY	ASTM D792	0.953	g/cm^3
HARDNESS (SHORE D)	ASTM D2240	55	N/A
MOLD SHRINKAGE LINEAR FLOW 1/8" SECTION LINEAR FLOW	ASTM D955	2.2	%
NOTCHED IZOD IMPACT	ASTM D256	6.55	Ft-lb/in
TENSILE STRENGTH (@YIELD)	ASTM D638	1634	Psi
TENSILE STRENGTH (@BREAK)	ASTM D638	1129	Psi
TENSILE MODULUS	ASTM D638	14537	Psi
TENSILE ELONGATION	ASTM D638	721	%
FLEXURAL MODULUS	ASTM D790	13101	Psi
FLEXURAL STRENGTH	ASTM D790	876	Psi

Molding Conditions:

PolyEarthylene® resins can be processed with conventional blown film equipment. The addition of this resin should be performed after a standard purging process. The melt temperature of the resin should be kept below 380°F if possible.

Every manufacturing process is different and the temperature ranges for blown film 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.®

Description of Temperature Zone	Temperatures (Range Value)
Feed	100-200°F
Barrel	330-380°F
Die	330-380°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.