POLYEARTHYLENE TECHNICAL DATA SHEET



30%

PRODUCT: PEL FL 297

PRODUCT DESCRIPTION: PEL-FL-297 is an LDPE film grade of PolyEarthylene with a biobased content of about 30%. It is designed as a shrink film meant to be processed with PEL-FZ-299. 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 1-3 years.

CHARACTERISTIC	TEST METHOD	VALUE	UNIT
MELT FLOW INDEX	ASTM D1238	0.20	g/10 min (190°C, 2.16Kg)
SPECIFIC GRAVITY	ASTM D792	0.929	g/cm ³
HARDNESS (SHORE D)	ASTM D2240	74	N/A
MOLD SHRINKAGE LINEAR FLOW 1/8" SECTION LINEAR FLOW	D955	2.63	%
NOTCHED IZOD IMPACT	D256	5.17	Ft-lb/in
TENSILE STRENGTH (@YIELD)	D638	1595	psi
TENSILE STRENGTH (@BREAK)	D638	1186	psi
TENSILE MODULUS	D638	29878	psi
TENSILE ELONGATION	D638	113	%
FLEXURAL MODULUS	D790	12539	psi
FLEXURAL STRENGTH	D790	757	psi

Film Processing Conditions:

PolyEarthylene resins can be processed with conventional 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 410°F if possible.

Every manufacturing process is different and the temperature ranges for 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.

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.

Living Document Revision: 3 Revision Date: 03/12/2025

Description of Temperature Zone	Temperatures (Range Value)	
Feed	320-340°F	
Barrel	380-410°F	
Die	380-410°F	

Effective Date: 03/12/2025

Biobased

Content (%)

(ASTM D6866)