PolyEarthylene®

Verde®

Technical Data Sheet

PEL FZ 343

Product Description

An LLDPE grade of PolyEarthylene® with a minimum biobased content of 50%. It is a cast film grade of PolyEarthylene® tailored specifically for a core layer of stretch film applications. It is designed to be processed with PEL FZ 344 to create a complete stretch film.

Renewable Content	
Minimum Biobased Content (%) (ASTM D6866)	50%
Est. Biodegradation Timeline (Years)	3-5

General

- Complies with U.S. FDA 21 CFR 177.1520 (c)3.1a
- No BPAs, phthalates, or PFAS intentionally added
- Recyclable
- Biodegrades in a landfill environment in 3-5 years under ASTM D5511

Properties	Value (English)	Value (SI)	Method
Melt Flow Index (190°C, 2.16 kg)	2.77 g/10min	2.77 g/10min	ASTM D1238 Procedure A
Specific Gravity	0.917	0.917	ASTM D792
Durometer Hardness (Shore D)	53	53	ASTM D2240
Tensile Strength @Yield	2,142 psi	14.7 MPa	ASTM D638
Tensile Strength @Break	2,011 psi	13.8 MPa	ASTM D638
Tensile Modulus	15,712 psi	108 MPa	ASTM D638
Tensile Elongation	937 %	937 %	ASTM D638
Flexural Modulus	15,290 psi	105.4 MPa	ASTM D790
Flexural Strength @Peak	917 psi	6.3 MPa	ASTM D790
1/8” Notch Izod Impact Strength (73 °F)	6.53 ft-lb/in	349.2 J/m	ASTM D256

Processing Conditions:

PolyEarthylene resins can be processed with conventional cast 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 450°F, if possible.

Manufacturing processes differ and the temperature ranges for cast 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.

Cast Film Processing Parameters:

Description of Temperature Zone	Temperatures (Range Value)
Feed	100-200°F
Barrel	340-450°F
Die Head	340-450°F

Disclaimer:

All data present has been analyzed in accordance with ASTM standards. 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 is typical and not to be construed as specifications.

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