PolyEarthylene®

Verde®

Technical Data Sheet

PEL THR 368

Product Description

An HDPE grade of PolyEarthylene® containing post-consumer recycled material with a minimum PCR content of 50%. It is an extrusion grade of PolyEarthylene® designed for sheet extrusion, thermoforming and blow molding applications.

Renewable Content	
Recycled Content (%)	>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)	0.85 g/10min	0.85 g/10min	ASTM D1238 Procedure A
Specific Gravity	1.026	1.026	ASTM D792
Durometer Hardness (Shore D)	67	67	ASTM D2240
Tensile Strength @Yield	3,292 psi	22.7 MPa	ASTM D638
Tensile Strength @Break	1,523 psi	10.5 MPa	ASTM D638
Tensile Modulus	92,679 psi	639 MPa	ASTM D638
Tensile Elongation	123 %	123 %	ASTM D638
Flexural Modulus	107,038 psi	738 MPa	ASTM D790
Flexural Strength @Peak	3,075 psi	21.2 MPa	ASTM D790
1/8” Notch Izod Impact Strength (73 °F)	1.77 ft-lb/in	94.6 J/m	ASTM D256

Processing Conditions:

PolyEarthylene resins can be processed with conventional thermoforming and blow molding equipment. The addition of this resin should be performed after a standard purging process. The melt temperature of the resin should be kept below 400°F, if possible.

Manufacturing processes differ and the temperature ranges for thermoforming and blow 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.

Thermoforming Processing Parameters:

Description of Temperature Zone	Temperatures (Range Value)
Feed	100-200°F
Barrel	330-400°F
Die Head	330-400°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.