

PRODUCT: PEL TPR 371

PRODUCT DESCRIPTION: PEL TPR 371 is a polypropylene-based extrusion grade containing 50% post-consumer recycled (PCR) content within the PolyEarthylene® product family. The material is designed for sheet extrusion, thermoforming and blow molding applications while maintaining the performance characteristics expected of conventional polypropylene compounds and is engineered to biodegrade in landfill environments with an estimated biodegradation timeline of approximately 2–5 years.

Renewable Content	
PCR Content (ASTM D6866)	50%

CHARACTERISTIC	TEST METHOD	VALUE	UNIT
MELT FLOW INDEX	ASTM D1238 Procedure A	4.71	g/10 min (230°C, 2.16Kg)
SPECIFIC GRAVITY	ASTM D792	0.987	g/cm ³
HARDNESS (SHORE D)	ASTM D2240	65	N/A
TENSILE STRENGTH (@BREAK)	ASTM D638	3,989	psi
TENSILE MODULUS	ASTM D638	80,061	psi
TENSILE ELONGATION	ASTM D638	559	%
IZOD IMPACT STRENGTH (NOTCH 1/8" SPECIMEN)	ASTM D256	0.91	ft-lb/in (73 °F)

Processing Conditions:

PolyEarthylene® resins can be processed with conventional sheet extrusion, 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 425°F, if possible.

Manufacturing processes differ and the temperature ranges for sheet extrusion, 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.®

Processing Conditions

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