

PRODUCT: PEL IPR 362

PRODUCT DESCRIPTION: PEL IPR 362 is a polypropylene-based injection molding grade containing 50% post-consumer recycled (PCR) content within the PolyEarthylene® product family. The material is designed for injection 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	20.67	g/10 min (230°C, 2.16Kg)
SPECIFIC GRAVITY	ASTM D792	0.997	g/cm ³
HARDNESS (SHORE D)	ASTM D2240	66	N/A
TENSILE STRENGTH (@YIELD)	ASTM D638	3,901	psi
TENSILE STRENGTH (@BREAK)	ASTM D638	2,262	psi
TENSILE MODULUS	ASTM D638	127,198	psi
TENSILE ELONGATION	ASTM D638	119	%
FLEXURAL MODULUS	ASTM D790	165,343	psi
FLEXURAL STRENGTH	ASTM D790	5,148	psi
IZOD IMPACT STRENGTH (NOTCH 1/8" SPECIMEN)	ASTM D256	0.63	ft-lb/in (73 °F)

Processing Conditions:

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

Manufacturing processes differ and the temperature ranges for injection 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.®

Injection Molding Conditions

Description of Temperature Zone	Temperatures (Range Value)
Feed	100-200°F
Barrel	330-425°F
Die Head	330-425°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.