

POLYEARTHYLENE TECHNICAL DATA SHEET



PRODUCT: PEL IL 294

PRODUCT DESCRIPTION: This LDPE grade of PolyEarthylene is biodegradable and recyclable resin containing more than 50% biobased content and is intended for injection molding applications and roto molding. All data presented has been analyzed in accordance with ASTM standards.

Renewable Content	
Biobased Content (%) (ASTM D6866)	56

CHARACTERISTIC	TEST METHOD	VALUE	UNIT
MELT FLOW INDEX	ASTM D1238 Procedure A	17.9	g/10 min (190°C, 2.16Kg)
SPECIFIC GRAVITY	ASTM D792	0.983	g/cm ³
HARDNESS (SHORE D)	ASTM D2240	72	N/A
TENSILE STRENGTH (@YIELD)	ASTM D638	1,693	psi
TENSILE STRENGTH (@BREAK)	ASTM D638	1,135	psi
TENSILE MODULUS	ASTM D638	42,231	psi
TENSILE ELONGATION	ASTM D638	132	%
FLEXURAL MODULUS	ASTM D790	24,578	psi
FLEXURAL STRENGTH	ASTM D790	1,217	psi
IZOD IMPACT STRENGTH (NOTCH 1/8" SPECIMEN)	ASTM D256	2.51	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.

Description of Temperature Zone	Temperatures (Range Value)
Feed	100-200°F
Barrel	340-380°F
Die Head	340-360°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.

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