POLYEARTHYLENE

TECHNICAL DATA SHEET



PRODUCT: PEL IH 314

PRODUCT DESCRIPTION: PEL-IH-314 is an HDPE grade of
PolyEarthylene is biodegradable and recyclable resin containing
more than 30% biobased content and is intended for injection
molding applications. All data presented has been analyzed in accordance with ASTM

Renewable Content

Biobased Content
(%) (ASTM D6866) > 30%

standards.

CHARACTERISTIC	TEST METHOD	VALUE	UNIT
MELT FLOW INDEX	ASTM D1238 Procedure A	16.96	g/10 min (190°C, 2.16Kg)
SPECIFIC GRAVITY	ASTM D792	0.952	g/cm ³
HARDNESS (SHORE D)	ASTM D2240	79	N/A
TENSILE STRENGTH (@YIELD)	ASTM D638	3024	psi
TENSILE STRENGTH (@BREAK)	ASTM D638	935	psi
TENSILE MODULUS	ASTM D638	71431	psi
TENSILE ELONGATION	ASTM D638	354	%
FLEXURAL MODULUS	ASTM D790	60191	psi
FLEXURAL STRENGTH	ASTM D790	2089	psi
IZOD IMPACT STRENGTH (NOTCH 1/8" SPECIMEN)	ASTM D256	0.58	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 $450\,^{\circ}$ 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	

DCR: 246

Effective Date: 03/20/2025

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.