

**POLYEARTHYLENE**  
**TECHNICAL DATA SHEET**



**MATERIAL:** PEL IP 242

**DESCRIPTION:** This material is a food contact and cosmetic grade PolyEarthylene for general use in injection molding. It has enhanced biodegradation and contains more than 50% biobased content.

PROCESSING CHARACTERISTICS	METHOD	VALUE	UNIT
PROCESSING TEMPERATURE	SOP	310-350	°F
MELT FLOW RATE (@230°C / 2.16 kg)	D1238	21.72	g/10 min
DRYING TEMPERATURE	SOP	n/a	°F
DRYING TIME	SOP	n/a	hours
MAX. MOISTURE IN PROCESS	SOP	0.1	%
GENERAL PHYSICAL PROPERTIES	ASTM		
SPECIFIC GRAVITY	D792	0.997	g/cm <sup>3</sup>
WATER ABSORPTION	D570		
METHOD A (24 HRS)		n/a	%
MOLD SHRINKAGE LINEAR FLOW	D955		
1/8" SECTION LINEAR FLOW		1.8	%
1/8" ACROSS FLOW		n/a	in./in.
MECHANICAL PROPERTIES			
TENSILE STRENGTH (@ YIELD)	D 882	2190	psi
TENSILE STRENGTH (@ BREAK)	D 882	1700	psi
ELONGATION	D 882	20.8	%
TENSILE MODULUS		292,000	psi
FLEXURAL STRENGTH	D790	3560	psi
FLEXURAL MODULUS	D790	108,000	psi
IZOD IMPACT STRENGTH @ 73 °F	D256		
NOTCH 1/8" SPECIMEN		3.9	ft.lb/in
HARDNESS	D2240	70	SHORE D
THERMAL PROPERTIES			
DEFLECTION TEMPERATURE (under load)	D648		
UNANNEALED @ 264 psi		n/a	°F
UNANNEALED @ 66 psi		n/a	°F
FLAMMABILITY VERTICAL BURN	UL94	n/a	@3.0 mm
ELECTRICAL PROPERTIES			
VOLUME RESISTIVITY	D257	n/a	Ohm-cm
DIELECTRIC STRENGTH	D149	n/a	kV/cm

DATA ARE OBTAINED FROM SPECIMENS MOLDED UNDER CAREFULLY CONTROLLED CONDITIONS FROM REPRESENTATIVES' 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