

POLYEARTHYLENE
TECHNICAL DATA SHEET



MATERIAL: PEL TH 175

DESCRIPTION: Sheet extrusion grade of PolyEarthylene for thermoforming. Bio-based resin.

PROCESSING CHARACTERISTICS		Min / Max	VALUE
STOCK MELT TEMPERATURE	SOP	280-285	°F
MOLD TEMPERATURE	SOP	80-100	°F
DRYING TEMPERATURE	SOP	N/A	°F
DRYING TIME	SOP	N/A	hours
MAX. MOISTURE IN PROCESS	SOP	.03	%
DRYER DEW POINT	SOP	N/A	°F
GENERAL PHYSICAL PROP.	ASTM		
SPECIFIC GRAVITY	D792	1.1	gms/cc
WATER ABSORPTION	D570		
METHOD A (24 HRS.) %		0.03	%
MOLD SHRINKAGE LINEAR FLOW	D955		
1/8" SECTION LINEAR FLOW		3.03	%
1/8" ACROSS FLOW			in./in.
HARDNESS (SHORE D)	D2240	72	-
MECHANICAL PROPERTIES			
IZOD IMPACT STRENGTH @ 73 °F	D256		
NOTCH 1/8" SPECIMEN		3.39	Ft.lb/in
UNNOTCHED 1/8" SPECIMEN			Ft.lb/in
TENSILE STRENGTH (@ YIELD)	D 882	2,940	psi
TENSILE STRENGTH (@ BREAK)	D 882	1,870	psi
TENSILE ELONGATION	D 882	65.5	%
FLEXURAL MODULUS	D790	178,000	psi
FLEXURAL STRENGTH	D790	5,100	psi
THERMAL PROPERTIES			
MELT FLOW RATE (@190 °C)	D1238	0.92	gms/10 min.
DEFLECTION TEMPERATURE (under load)	D648		
UNANNEALED @ 264 psi			°F
UNANNEALED @ 66 psi			°F
FLAMMABILITY VERTICAL BURN	UL94		@3.0 mm
ELECTRICAL PROPERTIES			
VOLUME RESISTIVITY	D257		Ohm.cm
DIELECTRIC STRENGTH	D149		v/mil

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

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1 Desiccant type dryer required. Always confirm that moisture levels are below the stated maximum before processing.
 2 Value PEL testing