

POLYMERS

SABIC[®] HDPE Bimodal Blown Film FI1157

PRODUCT DESCRIPTION

FI1157 is high molecular weight high density polyethylene copolymer grade specifically designed for blown film applications. The design of the product, molecular architecture and density, gives it a unique combination of easy extrusion and high melt strength with strong physical properties which makes it suitable for producing thin films with excellent strength and rigidity. The grade is designed specifically to produce thin films with good stiffness.

TYPICAL APPLICATIONS

FI1157 is recommended for blown film extrusion. It can be used for producing grocery sacks, shopping bags, refuse bags, thin films for bag on roll, wrapping film and also for replacement of thin paper products. Films produced with this product can be readily treated and printed to give high quality graphics.

TYPICAL DATA

PROPERTIES	Unit	Value ⁽¹⁾	Test Method
Melt Flow Rate			
@ 190°C & 5 kg load	g/10 min	0.35	ISO 1133
@ 190°C & 21.6 kg load		11	
Density @ 23°C	Kg/m ³	957	ISO 1183
MECHANICAL PROPERTIES ⁽²⁾			
Tensile Strength@ yield, MD, TD	MPa	50 , 45	ISO 527
Tensile elongation @ Break MD, TD	%	400 , 450	ISO 527
Dart Impact Strength, F50	g	240	ASTM D 1709
Elmendorf Tear Strength, MD, TD	mN	200 , 450	ISO 6383-2
Hardness (Shore D)	-	62	ISO 868
THERMAL PROPERTIES			
Vicat Softening Point	°C	75	ISO 306
Brittleness Temperature	°C	< -80	ASTM D 746

(1) Typical values: not to be construed as specification limits.

(2) Properties are based on 20 µm film produced at 4 BUR using 100% FI1157.

Processing Conditions:
Melt Temperature: 200-225°C
Frost line Height: 6-8 times die Ø
BUR: 3-5