

SABIC® HDPE FI1157

HIGH DENSITY POLYETHYLENE

DESCRIPTION

SABIC® HDPE FI1157 is a High Density Polyethylene copolymer grade typically used for blown film applications. It has high molecular weight, broad molecular weight distribution and high density to produce film with low gels level, high stiffness, high melt strength, high impact resistance and with narrow gauge tolerances at low film thickness. SABIC® HDPE FI1157 can be processed at high throughput with good bubble stability.

The product mentioned herein is in particular not tested and therefore not validated for use in pharmaceutical/ medical applications

TYPICAL APPLICATIONS

SABIC® HDPE FI1157 is typically used for the production of grocery sacks, shopping bags, refuse bags, inliners, bitumen release foils, lamination and paper lamination films, labels, artificial paper, thin films for bag on roll and heavy duty bags.

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
at 190 °C and 5 kg	0.35	g/10 min	ISO 1133
at 190 °C and 21.6 kg	11	g/10 min	ISO 1133
Density	957	kg/m ³	ASTM D1505
MECHANICAL PROPERTIES			
Hardness Shore D	62	-	ISO 868
FILM PROPERTIES			
Tensile Properties ⁽¹⁾			
stress at break, MD	50	MPa	ISO 527-3
stress at break, TD	45	MPa	ISO 527-3
strain at break, MD	400	%	ISO 527-3
strain at break, TD	450	%	ISO 527-3
Dart Impact Strength			
F50	240	g	ASTM D1709
Elmendorf Tear Strength			
MD	200	mN	ISO 6383-2
TD	450	mN	ISO 6383-2
THERMAL PROPERTIES			
Vicat Softening Temperature			
at 50 N (VST/B)	75	°C	ISO 306/B
Brittleness Temperature	<80	°C	ASTM D746

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