+135-3858-6433 (GuangDong)
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SABIC® LLDPE 218BE

LINEAR LOW DENSITY POLYETHYLENE

DESCRIPTION

SABIC® LLDPE 218BE is a butene linear low density polyethylene resin with an additive package typically designed for a broader range of food applications (TNPP free). The good thermal stability allows to use the resin in critical extrusion processing conditions.

Application
SABIC® LLDPE 218BE is typically used for food applications (lamination film, barrier film) but can also be used in industrial packaging and as blending partner with other SABIC® PE resins in both blown and cast film applications.

This product is not intended for and must not be used in any pharmaceutical/medical applications.

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
at 190 °C and 2.16 kg	2.1	dg/min	ISO 1133
Density	918	kg/m³	ASTM D1505
DSC			
melting point	122	°C	SABIC method
MECHANICAL PROPERTIES			
Tensile test			
strain at break	790	%	ASTM D638
stress at yield	12	MPa	ASTM D638
strain at yield	16	%	ASTM D638
stress at break	17	MPa	ASTM D638
Flexural test			
Secant modulus at 1% elongation	254	MPa	ASTM D790
Hardness Shore D	48	-	ISO 868
OPTICAL PROPERTIES			
Gloss (45°)	92	‰	ASTM D2457
Haze	1.2	%	ASTM D1003
FILM PROPERTIES			
Dart impact	2.8	kJ/m	ISO 7765-2
Tear strength TD	185	kN/m	ISO 6383-2
Protrusion Puncture resistance	2.2	J	ASTM D5748-95
Elastic recovery & Stress retention			
Stress retention	79.9	%	ASTM D5459-95
Elastic recovery	52.6	%	ASTM D5459-95
Peel cling			
200% pre-stretch	0.05	N/mm	ASTM D5458-95
0% pre-stretch	0.06	N/mm	ASTM D5458-95
THERMAL PROPERTIES			
Vicat Softening Temperature			
at 10 N (VST/A)	96	°C	ISO 306

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
DSC test			
melting point	122	°C	SABIC method
HIGHLIGHT PROPERTIES			
Ultimate pre-stretch level	310	%	-
Retention force at 60 sec	0.97	kg	-
ELECTRICAL PROPERTIES			
Volume resistivity	5.0E15	Ω.cm	ASTM D257
Dissipation factor at 60 Hz	1.0E3	-	ASTM D150
Dielectric constant at 60 Hz	2.17	-	ASTM D150
Dielectric strength at 500 V/sec	55	V/µm	ASTM D149