PETRODUCT
Petrochemical trading Co.

Product Data Sheet

LFI 2119

Low Density Polyethylene

Product Description

LFI 2119 is a low-density polyethylene, with excellent optical properties. This grade offers high output and excellent draw down ability during processing and specially designed for general-purpose thin films. LFI 2119 has been manufactured under SABTEC licensed technology.

General Information

Status	Commercial: Active		
Application	Blown film extrusion- Packaging film and general lamination films		
Form(s)	Pellet		
Attribute	Very good optical properties- Good toughness- Good melt strength.		
Additives	Antioxidant: Yes	Antiblock : No	Slip Agent : No

Typical Properties	Typical Value [1]	Unit	Test Method
Physical			
MFI (190 °C /2.16 Kg)	1.9	dg/min	ISO 1133
Density [2]	921	Kg/m^3	ISO 1183 (A)
Mechanical [3]			
Impact Strength	26	kJ/m	ASTM D4272
Tear Strength (TD)	25	kN/m	ISO 6383-2
Tear Strength (MD)	60	kN/m	ISO 6383-2
Yield Stress (TD)	11	MPa	ISO 527-1,3
Yield Stress (MD)	13	MPa	ISO 527-1,3
Tensile Stress at Break (TD)	20	MPa	ISO 527-1,3
Tensile Stress at Break (MD)	35	MPa	ISO 527-1,3
Strain at Break (TD)	>500	%	ISO 527-1,3
Strain at Break (MD)	>150	%	ISO 527-1,3
Modulus of Elasticity (TD)	200	MPa	ISO 527-1,3
Modulus of Elasticity (MD)	190	MPa	ISO 527-1,3

Coefficient of Friction	>1	-	ASTM D1894
Blocking	20	g	ASTM D3354
Re-blocking	100	g	SABTEC method
Optical [3]			
Haze	9	%	ASTM D1003 A
Gloss (45°)	55	GU	ASTM D2457

Recommended Process Conditions [4]

Extruder temperature profile: 165-185°C	Blow up ratio: 2-3
film thickness: 20-50 µm	

1. Typical values: these are not to be construed as specifications.
2. The density parameter was determined on compression-molded specimens, which were prepared in accordance with procedure C of ASTM D4703, Annex A1.
3. Properties are based on 25 µm blown film produced at a melt temperature of 170°C and 3 BUR using 100% LFI2119.
4. Please note that, these processing conditions are recommended by producer only for 100% LFI2119 resin (not in the case of blending with any other compatible material), but because of the many particular factors which are outside our knowledge and control, and may affect the use of product, no warranty is given.