LFI 2047A

Description

LFI 2047A is a low-density polyethylene with good toughness and good optical properties. LFI 2047A contains a medium level of antiblock and slip agent (Erucamide) additives. This grade offers low energy consumption and good drawdown ability during processing. It typically exhibits low friction and low blocking properties. LFI 2047A has been manufactured under SABTEC licensed technology.

Application

Blown film extrusion- High clarity laundry bags- Textile wrapping films- Zip lock bags.

Additives

Antioxidant: Yes, Antiblock: Yes, Slip Agent: Yes

Typical Properties	Typical Value	Unit	Test Method
Physical			
MFI (190 °C / 2.16 Kg)	4.7	dg/min	ISO 1133
Density	920	kg/m³	ISO 1183
Mechanical			
Impact Strength	15	kJ/m	ASTM D4272
Tear Strength (TD)	25	kN/m	ISO 6383-2
Tear Strength (MD)	80	kN/m	ISO 6383-2
Yield Stress (TD)	11	MPa	ISO 527-1,3
Yield Stress (MD)	12	MPa	ISO 527-1,3
Tensile Stress at Break (TD)	15	MPa	ISO 527-1,3
Tensile Stress at Break (MD)	27	MPa	ISO 527-1,3
Strain at Break (TD)	> 500	%	ISO 527-1,3
Strain at Break (MD)	> 100	%	ISO 527-1,3
Modulus of Elasticity (TD)	200	MPa	ISO 527-1,3
Modulus of Elasticity (MD)	200	MPa	ISO 527-1,3
Coefficient of Friction	0.2	-	ASTM D1894
Blocking	20	g	ASTM D3354
Re-blocking	10	g	SABTEC method
Optical			
Haze	9	%	ASTM D1003 A
Gloss (45°)	55	%	ASTM D2457
Clarity	21	mV	SABTEC method
Recommended Process Conditions			
Extruder temperature profile	145-160	°C	
Blow-up ratio	2-3	-	
Film thickness	25-50	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.
3. Properties are based on 25 µm blown film produced at a melt temperature of 160°C and 3 BUR using 100% LFI 2047A.
4. The recommended processing conditions apply only to 100% LFI2047A resin and not to blends with other materials. However, due to various uncontrollable factors that may affect product use, no warranty is provided.

Further Information

Storage

Polyethylene resins must be stored properly (cool, dry, clean conditions under 50°C) and used within 6 months to avoid quality issues. Arya Sasol offers no warranty for poor storage or specific product performance. Users are responsible for testing and regulatory compliance.