



Adflex Q 100 F

Advanced Polyolefin

Product Description

Adflex Q 100 F is a thermoplastic polyolefin, which is mainly used by our customers for the extrusion of blown film. It is also suitable for sheet extrusion.

Adflex Q 100 F features very high softness and very low modulus. It does not contain any slip or anti-blocking agents. Adflex Q 100 F is used for the production of soft hygienic film and heavy duty film, as well as for the modification of LDPE or LLDPE to increase mechanical characteristics, puncture resistance, and to allow further downgauging. It can be easily processed on conventional LDPE or LLDPE blown film lines.

For regulatory information please refer to Adflex Q 100 F Product Stewardship Bulletin (PSB).

Product Characteristics

Status	Commercial: Active
Test Method used	ISO
Availability	Europe, North America, Asia-Pacific, Australia/NZ, Africa-Middle East, Latin America
Processing Methods	Blown Film, Double Bubble, Extrusion Blow Molding
Features	Good Flexibility, Low Temperature Impact Resistance, Good Processability, Good Puncture Resistance, Soft, Good Tear Strength, Low Transparency
Typical Customer Applications	Agriculture Film, Bags & Pouches, Barrier Film, Blown Film, Breathable Film, Collapsible Tubes, Double Bubble Shrink Film, Film Wrap, Food Packaging Film, Heavy Duty Packaging, Hygiene Film, Lamination Film, Stretch Hood, Surface Protection Film

Typical Properties	Method	Value	Unit
Physical			
Density	ISO 1183	0.88	g/cm ³
Melt flow rate (MFR) (230°C/2.16Kg)	ISO 1133	0.6	g/10 min
Mechanical			
Tensile Stress at Break	ISO 527-1, -2	10	MPa
Tensile Strain at Break	ISO 527-1, -2	> 400	%
Flexural modulus	ISO 178	100	MPa
Impact			
Notched izod impact strength (- 20 °C, Type 1, Notch A)	ISO 180	No break	
(23 °C, Type 1, Notch A)		No break	
Hardness			
Shore hardness (Shore D) <i>Note: 15 seconds</i>	ISO 868	30	
Thermal			
Melting temperature <i>Note: ISO 11357-3</i>		140	°C
Heat deflection temperature B (0.45 MPa) Unannealed	ISO 75B-1, -2	40	°C
Vicat softening temperature (A50 (50°C/h 10N))	ISO 306	60	°C
Optical			
Haze (50 µm)	ASTM D 1003	50	%
Gloss (45°, 50 µm)	ASTM D 2457	9	

Additional Properties

Film properties obtained on blown film produced with laboratory line under internal standard conditions.

Tensile Young modulus, MD/TD, ISO 527-3, 25 mm/min, 50 µm: 90/90 MPa
 Stress at Yield, MD/TD, ISO 527-3, 500 mm/min, 50 µm: 7.5/7.5 MPa
 Elongation at Yield, MD/TD, ISO 527-3, 500 mm/min, 50 µm: 40/40 %
 Stress at Break, MD/TD, ISO 527-3, 500 mm/min, 50 µm: 40/37 MPa
 Elongation at Break, MD/TD, ISO 527-3, 500 mm/min, 50 µm: 1000/1000 %

Notes

Typical properties; not to be construed as specifications.