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Adflex **V 109 F**

Advanced Polyolefin

Product Description

Adflex V 109 F is a reactor TPO (thermoplastic polyolefin) manufactured using LyondellBasell's proprietary *Catalloy* process technology. It is primarily used for molding, impact modification, extrusion coating and film applications. This resin can be used on conventional injection molding or extrusion equipment.

Adflex V 109 F features a very high softness and low modulus, with a relatively high melt flow. The grade is avaiable in natural pellet form.

For regulatory compliance information, see the *Adflex* V 109 F Product Stewardship Bulletin (PSB).

Product Characteristics

Status	Commercial: Active
Test Method used	ISO
Availability	North America
Processing Methods	Cast Film, Injection Molding
Features	Clarity, Contact, Low Temperature Impact Resistance, Soft
Typical Customer Applications	Film Wrap, Housewares, Industrial, Roofing Underlayment, Sports, Leisure and Toys

Typical Properties	Method	Value	Unit
Physical			
Density (Method A)	ISO 1183	0.89	g/cm³
Melt flow rate (MFR) (230 °C/ 2.16 kg)	ISO 1133	12	g/10 min
Mechanical			
Tensile Stress at Break	ISO 527-1, -2	8	MPa
Tensile Stress at Yield	ISO 527-1, -2	5	MPa
Tensile Strain at Break	ISO 527-1, -2	> 800	%
Tensile Strain at Yield	ISO 527-1, -2	> 40	%
Flexural modulus	ISO 178	80	MPa
Impact			
Notched izod impact strength	ISO 180		
(- 40°C, Type 1, Notch A)		2	kJ/m²
(23 °C, Type 1, Notch A)		No Break	
Ductile/Brittle transition temperature	ISO 6603-2	-55	°C
Hardness			
Shore hardness (Shore A)	ISO 868	85	
Shore hardness D	ISO 868/ASTM D 2240	30	
Note: 15 seconds			
Thermal			
Heat deflection temperature B (0.45 MPa) Unannealed	ISO 75B-1, -2	35	°C
Vicat softening temperature (A50 (50°C/h 10N) °C)	ISO 306	55	°C
Melting temperature	DSC	142	°C
Note: ISO 11357-3			

Additional Properties

Tear Strength (Graves, Die C, 50 mm/min), ASTM D 624: 65 N/mm
Load/Width @ Max Load
Mold Shrink, ISO 294-4: 0.9 %
48 hr after molding, 100 mmx150 mmx3.2 mm plaque

Notes

Typical properties; not to be construed as specifications.