Adflex Z 108 S

Advanced Polyolefin

Product Description

Adflex Z 108 S is a reactor TPO (thermoplastic polyolefin) manufactured using the LyondellBasell's proprietary *Catalloy* process technology. *Adflex* Z 108 S features a very high softness, a very low flexural modulus and a high melt flow rate.

It is used for injection molding, impact modification, extrusion coating, soft compounding, film and fiber applications. It is also ideal for the modification of polypropylene homopolymer and random copolymer without altering the transparency. The grade is available in natural pellet form.

For regulatory compliance information see *Adflex* Z 108 S Product Stewardship Bulletin (PSB).

Product Characteristics

Status	Commercial: Active
Test Method used	ISO
Availability	North America, Latin America
Processing Methods	Extrusion Compounding, Extrusion Coating, Injection Molding
Features	High Elongation, High Flow , Low Hardness , Low Temperature Impact Resistance
Typical Customer Applications	Cast Film, Impact modification, Roofing Underlayment, TPO Skins

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	27	g/10 min
Mechanical			
Tear Strength	ASTM D 624	62 N/mm	
Note: (Graves, Die C, 50mm/min) - Load/Width @ Max Load			
Tensile Stress at Break	ISO 527-1, -2	6	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	20	%
Flexural modulus	ISO 178	80	MPa
Impact			
Notched izod impact strength	ISO 180		
(23 °C, Type 1, Notch A)		No Break	kJ/m²
(- 40°C, Type 1, Notch A)		2	kJ/m²
Ductile/Brittle transition temperature	ISO 6603-2	-55	°C
Multiaxial Impact Strength	ASTM D3763		
(Energy@ Max Load +23 °C, 2.2m/s, 3.2mm plq; Failure Mode: Ductile)		10	J
(Energy@ Max Load -40°C, 2.2m/s, 3.2mm plq; Failure Mode: Ductile)		18	J
Hardness			
Shore hardness	ISO 868		
(Shore A)		85	
(Shore D)		30	
Note: 15 seconds			
Thermal			
Heat deflection temperature B (0.45 MPa) Unannealed	ISO 75B-1, -2	37	°C
Vicat softening temperature (A50 (50°C/h 10N))	ISO 306	53	°C
Melting temperature	DSC	142	°C
Note: (ISO 11357-3)			
Optical			
Gloss (60°, 3.2mm Injection Molded Plaque)	ASTM D 2457	66	

Notes

Typical properties; not to be construed as specifications.