

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/cm ³
Melt flow rate (MFR) (230 °C/ 2.16 kg)	ISO 1133	27	g/10 min
Mechanical			
Tear Strength	ASTM D 624	62 N/mm	
<i>Note: (Graves, Die C, 50mm/min) - Load/Width @ Max Load</i>			
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 (23 °C, Type 1, Notch A)	ISO 180	No Break	kJ/m ²
(- 40°C, Type 1, Notch A)		2	kJ/m ²
Ductile/Brittle transition temperature	ISO 6603-2	-55	°C
Multiaxial Impact Strength (Energy@ Max Load +23 °C, 2.2m/s, 3.2mm plq; Failure Mode: Ductile)	ASTM D3763	10	J
(Energy@ Max Load -40°C, 2.2m/s, 3.2mm plq; Failure Mode: Ductile)		18	J
Hardness			
Shore hardness (Shore A)	ISO 868	85	
(Shore D)		30	
<i>Note: 15 seconds</i>			
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
<i>Note: (ISO 11357-3)</i>			
Optical			
Gloss (60°, 3.2mm Injection Molded Plaque)	ASTM D 2457	66	

Notes

Typical properties; not to be construed as specifications.

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LyondellBasell markets this product through the following entities:

- Equistar Chemicals, LP
- Basell Sales & Marketing Company B.V.
- Basell Asia Pacific Limited
- Basell International Trading FZE
- LyondellBasell Australia Pty Ltd

For the contact details of the LyondellBasell company selling this product in your country, please visit <http://www.lyb.com/>.

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This product(s) may not be used in:

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(iii) Additionally, the product(s) may not be used in: (1) U.S. FDA Class III, Health Canada Class IV, and/or European Class III Medical Devices; (2) applications involving permanent implantation into the body; (3) life-sustaining medical applications; and (4) lead, asbestos or MTBE related applications.

All references to U.S. FDA, Health Canada, and European Union regulations include another country's equivalent regulatory classification.

Users should review the applicable Material Safety Data Sheet before handling the product.

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