

Adflex Z 108 S

Catalloy

Product Description

Adflex Z 108 S is a reactor TPO (thermoplastic polyolefin) manufactured using the proprietary *Catalloy* process technology from LyondellBasell. Adflex Z 108 S features a very high softness, a very low flexural modulus and a high melt flow rate. It is used by customers for injection molding, impact modification, extrusion coating, soft compounding, film and fiber applications. It is also selected by customers for the modification of polypropylene homopolymer and random copolymer without altering the transparency. The grade is available in natural pellet form.

Regulatory Status

For regulatory compliance information, see Adflex Z 108 S [Product Stewardship Bulletin \(PSB\) and Safety Data Sheet \(SDS\)](#).

Status	Commercial: Active
Availability	Europe; North America; South & Central America
Application	Carpet Backing; Filament Yarn; Hygiene Nonwoven; Impact Modification; Pipe Coating; Roofing Underlayment; TPO Foils and Skins
Market	Flexible Packaging; Industrial, Building & Construction; Textile
Processing Method	Cast Film; Compounding; Continuous Filament/Spinning; Extrusion Coating; Injection Molding; Spunbond
Attribute	High Elongation; High Flow; Low Hardness; Low Temperature Impact Resistance; Narrow Molecular Weight Distribution

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (230 °C/2.16 kg)	27	g/10 min	ISO 1133-1
Density, (23 °C, Method A)	0.88	g/cm ³	ISO 1183-1
Mechanical			
Flexural Modulus	80	MPa	ISO 178
Tear Strength	62	kN/m	ASTM D624
Tensile Stress at Break	6	MPa	ISO 527-1, -2
Tensile Stress at Yield	5	MPa	ISO 527-1, -2
Tensile Strain at Break	800	%	ISO 527-1, -2
Tensile Strain at Yield	20	%	ISO 527-1, -2
Impact			
Charpy Impact Strength - Notched			
(23 °C)	33	kJ/m ²	ISO 179
Note: Failure Mode - Partial Break			
(-20 °C)	2.8	kJ/m ²	ISO 179
Note: Failure Mode - Partial Break			
(-40 °C)	1.3	kJ/m ²	ISO 179
Note: Failure Mode - Complete Break			

Multi-axial Impact Strength		
(23° C, 2.2 m/s, 3.2 mm plaque)	10 J	ASTM D3763
Note: Failure Mode - Ductile		
(-40°C, 2.2 m/s, 3.2 mm plaque)	18 J	ASTM D3763
Note: Failure Mode - Ductile		
Hardness		
Shore Hardness, (Shore D, 15 sec)	30	ISO 868
Thermal		
Vicat Softening Temperature, (A50)	53 °C	ISO 306
Heat Deflection Temperature B, (0.45 MPa, Unannealed)	37 °C	ISO 75B-1, -2
DSC Melting Point	142 °C	ISO 11357-3
Optical		
Haze, (45 mil)	49 %	ASTM D1003
Gloss, (60°, 45 mil)	62	ASTM D2457
Additional Information		
Mold Shrinkage		ISO 294-4
Please contact LyondellBasell for shrinkage information.		

Notes

These are typical property values not to be construed as specification limits.

Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Company Information

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