

Catalloy

Product Description

Adflex Z 101 H is a reactor TPO (thermoplastic polyolefin) manufactured using the LyondellBasell's proprietary Catalloy process technology.

It exhibits high softness and low modulus, with high melt flow index.

Adflex Z 101 H is tailored to replace atactic polypropylene copolymers (APP) used for the modification of bitumen in roofing membranes. The percentage to be added can vary according to the quantity of the atactic polypropylene used in combination with Adflex Z 101 H and the requested cold bending temperature of the end product. Its structure is tailored to obtain easy dispersion and phase inversion in the bitumen blend.

The grade is available in natural pellet form.

Regulatory Status

For regulatory compliance information, see Adflex Z101H [Product Stewardship Bulletin \(PSB\) and Safety Data Sheet \(SDS\)](#).

Status	Commercial: Active
Availability	Africa-Middle East; Asia-Pacific; Australia and New Zealand; Europe; North America; South & Central America
Application	Bitumen Modification; Bulk Continuous Filament & Continuous Filament; Carpet Backing; Filament Yarn; Hygiene Nonwoven; Impact Modification; Nonwovens; Soft Touch Applications
Market	Textile
Processing Method	Compounding; Continuous Filament/Spinning; Extrusion Coating; Extrusion Flat-die; Fibers; Injection Molding; Spunbond; Staple Fiber
Attribute	Good Chemical Resistance; Good ESCR (Environmental Stress Cracking Resistance); High Filler Loading Capability; High Flow; Low Temperature Flexibility; Low Temperature Impact Resistance; Soft

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
Tensile Stress at Break	10	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	45	%	ISO 527-1, -2
Impact			
Charpy Impact Strength - Notched			
(23 °C)	NB	kJ/m ²	ISO 179
(-20 °C)	100	kJ/m ²	ISO 179
(-40 °C)	2	kJ/m ²	ISO 179
Hardness			
Shore Hardness, (Shore D)	30		ISO 868

Thermal		
Vicat Softening Temperature, (A50)	53 °C	ISO 306
Deflection Temperature Under Load, (0.45 MPa, Unannealed)	38 °C	ISO 75B-1, -2
Melting Temperature	142 °C	ISO 11357-3

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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