

Adflex X 500 F

Catalloy

Product Description

Adflex X 500 F is a thermoplastic polyolefin which is typically used in co-extruded cast film and injection moulding applications. Adflex X 500 F features a high softness, a low modulus, high gloss and excellent clarity. It has been selected by customers for use in a central layer of tough transparent co-extruded cast-film structures. It can be blended with other transparent polyolefinic resins to improve the low temperature impact resistance maintaining the transparency of the film. Adflex X 500 F can be processed on conventional PP cast film lines. It is also suited for injection moulding applications where high transparency and good gloss combined with good flexibility is required like e.g. housewares and toys. It does not contain any slip nor anti-blocking agents.

Regulatory Status

For regulatory compliance information, see Adflex X 500 F [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	Bags & Pouches; Breathable Film; Clear Containers; Food Packaging Film; Hygiene Film; Lamination Film; Stationery Film
Market	Flexible Packaging; Rigid Packaging
Processing Method	Cast Film; Extrusion Coating; Injection Molding
Attribute	Good Processability; High Heat Resistance; High Transparency; Low Temperature Impact Resistance; Medium Stiffness

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (230 °C/2.16 kg)	7.5	g/10 min	ISO 1133-1
Density, (23 °C, Method A)	0.89	g/cm³	ISO 1183-1
Mechanical			
Flexural Modulus	550	MPa	ISO 178
Tensile Stress at Break	22	MPa	ISO 527-1, -2
Tensile Stress at Yield	14	MPa	ISO 527-1, -2
Tensile Strain at Break	700	%	ISO 527-1, -2
Tensile Strain at Yield	20	%	ISO 527-1, -2
Impact			
Charpy Impact Strength - Notched			
(23 °C)	65	kJ/m²	ISO 179
Note: Failure Mode - Partial Break			
(-20 °C)	45	kJ/m²	ISO 179
Note: Failure Mode - Partial Break			
(-40 °C)	5	kJ/m²	ISO 179
Note: Failure Mode - Complete Break			
Hardness			

Shore Hardness, (Shore D, 15 sec)	46	ISO 868
Thermal		
Vicat Softening Temperature, (A50)	94 °C	ISO 306
Heat Deflection Temperature B, (0.45 MPa, Unannealed)	58 °C	ISO 75B-1, -2
DSC Melting Point	163 °C	ISO 11357-3
Optical		
Haze		
(50 µm)	13 %	ASTM D1003
(45 mil)	23 %	ASTM D1003
Gloss		
(60°, 45 mil)	110	ASTM D2457
(45°, 50 µm)	60	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

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

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