Technical Data Sheet

Adflex Q 100 F



Catalloy

Product Description

Adflex Q 100 F is a thermoplastic polyolefin, which is mainly used by our customers for the extrusion of blown film. It is also suitable for sheet extrusion. Adflex Q 100 F features very high softness and very low modulus. It does not contain any slip or anti-blocking agents.

Adflex Q 100 F is used for the production of soft hygienic film and heavy duty film, as well as for the modification of LDPE or LLDPE to increase mechanical characteristics, puncture resistance, and to allow further downgauging.

It can be easily processed on conventional LDPE or LLDPE blown film lines.

Regulatory Status

For regulatory compliance information, see *Adflex* Q 100 F <u>Product Stewardship Bulletin (PSB) and Safety Data Sheet (SDS)</u>.

Status Commercial: Active

Availability Africa-Middle East; Asia-Pacific; Australia and New Zealand; Europe; North America;

South & Central America

Application Agriculture Film; Bags & Pouches; Barrier Film; Breathable Film; Collapsible Tubes;

Film Wrap; Food Packaging Film; Heavy Duty Packaging; Hygiene Film; Interior Automotive Applications; Lamination Film; Shrink Film; Stretch Hood; Surface

Protection Film; TPO Foils and Skins

Market Flexible Packaging; Rigid Packaging

Processing Method Blown Film; Calendaring; Double Bubble; Extrusion Blow Molding; Extrusion Flat-die;

Sheet; Thermoforming

Attribute Good Flexibility; Good Processability; Good Puncture Resistance; Good Tear

Strength; Low Temperature Impact Resistance; Low Transparency; Soft

	Nominal		Test Method
Typical Properties	Value	Units	
Physical			
Melt Flow Rate, (230 °C/2.16 kg)	0.6	g/10 min	ISO 1133-1
Density, (23 °C, Method A)	0.88	g/cm³	ISO 1183-1
Mechanical			
Flexural Modulus	100	MPa	ISO 178
Tensile Stress at Break	10	MPa	ISO 527-1, -2
Tensile Stress at Yield	No Yield Pt	MPa	ISO 527-1, -2
Tensile Strain at Break	500	%	ISO 527-1, -2
Tensile Strain at Yield	No Yield Pt	%	ISO 527-1, -2
Impact			

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Charpy Impact Strength - Notched			
(23 °C)	No Break		ISO 179
(-20 °C)	110	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)	30		ISO 868
Thermal			
Vicat Softening Temperature, (A50)	60	°C	ISO 306
Heat Deflection Temperature B, (0.45 MPa, Unannealed)	40	°C	ISO 75B-1, -2
DSC Melting Point	142	°C	ISO 11357-3
Optical			
Gloss, (60°, 45 mil)	85		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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Users should review the applicable Safety Data Sheet before handling the product.

This product(s) may not be used in the manufacture of any of the following, without prior written approval by Seller for each specific product and application:

- (i) U.S. FDA Class I or II Medical Devices; Health Canada Class I, II or III Medical Devices; European Union Class I or II Medical Devices;
- (ii) film, overwrap and/or product packaging that is considered a part or component of one of the aforementioned medical devices;
- (iii) packaging in direct contact with a pharmaceutical active ingredient and/or dosage form that is intended for inhalation, injection, intravenous, nasal, ophthalmic (eye), digestive, or topical (skin) administration;
- (iv) tobacco related products and applications, electronic cigarettes and similar devices.
- (v) safety components in automotive applications, for example: air bags, air bag unit housings and covers, seat belt mechanisms, brake systems, pedals and pedal supports, steering systems.

The product(s) may not be used in:

- (i) U.S. FDA Class III Medical Devices; Health Canada Class IV Medical Devices; European Class III Medical Devices;
- (ii) applications involving permanent implantation into the body;
- (iii) life-sustaining medical applications.

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

In addition to the above, LyondellBasell may further prohibit or restrict the use of its products in certain applications. For further information, please contact a LyondellBasell representative.

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