Technical Data Sheet

Adflex V 109 F

Catalloy

Product Description

Adflex V 109 F is a reactor TPO (thermoplastic polyolefin) manufactured using LyondellBasell's proprietary *Catalloy* process technology. It is primarily used for molding, impact modification, extrusion coating and film applications. This resin can be used on conventional injection molding or extrusion equipment. *Adflex* V 109 F features a very high softness and low modulus, with a relatively high melt flow. The grade is available in natural pellet form.

Regulatory Status

For regulatory compliance information, see *Adflex* V 109 F Product Stewardship Bulletin (PSB) and Safety Data Sheet (SDS).

Status	Commercial: Active
Availability	North America; South & Central America
Application	Automotive Flooring; Film Wrap; Housewares; Industrial; Specialty Film; Sports, Leisure & Toys; TPO Residential Flooring
Market	Flexible Packaging; Rigid Packaging
Processing Method	Cast Film; Compounding; Injection Molding
Attribute	Contact Clarity; Low Temperature Impact Resistance; Soft

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (230 °C/2.16 kg)	12	g/10 min	ISO 1133-1
Density, (23 °C, Method A)	0.88	g/cm³	ISO 1183-1
Mechanical			
Flexural Modulus	80	MPa	ISO 178
Tear Strength	65	kN/m	ASTM D624
Tensile Stress at Break	8	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	40	%	ISO 527-1, -2
Impact			
Charpy Impact Strength - Notched			
(23 °C)	35	kJ/m²	ISO 179
Note: Failure Mode - Partial Break			
(-20 °C)	5	kJ/m²	ISO 179
Note: Failure Mode - Partial Break			
(-40 °C)	1.4	kJ/m²	ISO 179
Note: Failure Mode - Complete Break			
Hardness			
Shore Hardness, (Shore D, 15 sec)	30		ISO 868

Thermal			
Vicat Softening Temperature, (A50)	55	°C	ISO 306
Heat Deflection Temperature B, (0.45 MPa, Unannealed)	35	°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

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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