



Adflex Q 302 B

LyondellBasell Industries - Polyolefin

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General Information

Product Description

Adflex Q 302 B is a reactor TPO (thermoplastic polyolefin) manufactured using LyondellBasell's proprietary Catalloy process technology. It is an innovative material that resists gas fading and brings a warm and sensual feel, creating a truly unique sensation. Part of a family of polymers with a soft, velvety texture, Adflex Q 302 B resin enables packagers to give their products a distinct edge over conventional plastics. Bottles blow molded from Adflex Q 302 B resin convey an upscale, quality image that enhances point of purchase appeal. The unique texture is also ideal for applications requiring a no-slip surface, such as shower soaps and lotions.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Latin America • North America	
Features	• Chemical Resistant • Gas-fading Resistant • Good Surface Finish	• High ESCR (Stress Crack Resist.) • High Heat Resistance • High Strength	• Puncture Resistant • Recyclable Material • Soft
Uses	• Bottles • Consumer Applications	• Packaging • Rigid Packaging	• Sporting Goods • Toys
Processing Method	• Blow Molding	• Extrusion Blow Molding	• Injection Blow Molding

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density (73°F)	0.880	g/cm ³	ISO 1183/A
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	0.90	g/10 min	ISO 1133
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress (Yield)	1230	psi	ISO 527-2
Tensile Stress (Break)	1450	psi	ISO 527-2
Tensile Strain (Yield)	37	%	ISO 527-2
Tensile Strain (Break)	500	%	ISO 527-2
Flexural Modulus	50800	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179
-40°F, Complete Break	1.5	ft-lb/in ²	
-4°F, Partial Break	47	ft-lb/in ²	
73°F, Partial Break	33	ft-lb/in ²	
Hardness	Nominal Value	Unit	Test Method
Shore Hardness (Shore D, 15 sec)	38		ISO 868
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (66 psi, Unannealed)	126	°F	ISO 75-2/B
Vicat Softening Temperature	153	°F	ISO 306/A50
Melting Temperature	325	°F	ISO 11357-3
Optical	Nominal Value	Unit	Test Method
Gloss (60°, 45.0 mil)	49		ASTM D2457
Haze (45.0 mil)	96.0	%	ASTM D1003

Notes

¹ Typical properties: these are not to be construed as specifications.