

Moplen EP310D

Polypropylene Impact Copolymer

LyondellBasell Industries

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Technical Data

Product Description

Moplen EP310D is a low fluidity heterophasic copolymer designed for extrusion applications where smooth processability and high mechanical properties are of the utmost importance. Main applications are extrusion of film for heavy duty applications, adhesive tapes, lamination film and extrusion blow moulded containers for e.g. detergents.

Moplen EP310D is suitable for food contact.

For regulatory information please refer to Moplen EP310D Product Stewardship Bulletin (PSB).

General

Material Status	• Commercial: Active
Literature ¹	• Processing - Extrusion (English) • Processing - Injection Molding (English) • Processing - Mold Shrink (English) • Technical Datasheet - ASTM (English) • Technical Datasheet - ISO (English)
Search for UL Yellow Card	• LyondellBasell Industries • Moplen
Availability	• Africa & Middle East • Europe
Features	• Food Contact Acceptable • Good Processability • Impact Copolymer • Low Flow
Uses	• Blow Molding Applications • Containers • Film • Food Packaging • Laminates • Tape
Processing Method	• Blown Film • Extrusion • Extrusion Blow Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.900 g/cm ³	0.900 g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	0.95 g/10 min	0.95 g/10 min	ISO 1133

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Stress			
Yield	3770 psi	26.0 MPa	ISO 527-2/50
Break	4350 psi	30.0 MPa	ISO 527-2
Tensile Strain			ISO 527-2/50
Yield	13 %	13 %	
Break	> 500 %	> 500 %	
Flexural Modulus	152000 psi	1050 MPa	ISO 178

Films	Nominal Value (English)	Nominal Value (SI)	Test Method
Secant Modulus - MD (2.0 mil (50 µm), Cast Film)	72500 psi	500 MPa	ASTM D882
Tensile Strength - MD ³			ASTM D882
Yield, 2.0 mil (50 µm), Cast Film	2320 psi	16.0 MPa	
Break, 2.0 mil (50 µm), Cast Film	9140 psi	63.0 MPa	
Tensile Elongation - MD ³			ASTM D882
Break, 2.0 mil (50 µm), Cast Film	830 %	830 %	
Dart Drop Impact (Cast Film)	> 1500 g	> 1500 g	ASTM D1709

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-4°F (-20°C)	2.9 ft·lb/in ²	6.0 kJ/m ²	
73°F (23°C)	33 ft·lb/in ²	70 kJ/m ²	

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Heat Deflection Temperature			ISO 75-2/B
66 psi (0.45 MPa), Unannealed	176 °F	80.0 °C	
Vicat Softening Temperature	302 °F	150 °C	ISO 306/A50

Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Gloss (1.97 mil (50.0 µm), Cast Film)	17	17	ASTM D2457



Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Haze (1.97 mil (50.0 µm), Cast Film)	48 %	48 %	ASTM D1003

Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² Typical properties: these are not to be construed as specifications.

³ 20 in/min (500 mm/min)



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Where to Buy

Supplier

LyondellBasell Industries

Wilmington, DE USA

Telephone: 713-309-7200

Web: <http://polymers.lyondellbasell.com/portal/site/basell/>

Distributor

Ultrapolymers

Ultrapolymers is a Pan European distribution company. Contact Ultrapolymers for availability of individual products by country.

Telephone: +32-11-57-95-57

Web: <http://www.ultrapolymers.com/>

Availability: Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, Italy, Latvia, Lithuania, Macedonia, Netherlands, Norway, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Turkey, United Kingdom

