

Technical Data

Product Description

Moplen HP456J is used in extrusion and thermoforming applications. It is formulated with a low water-carry-over additive package. Typical applications are monofilaments, ropes and tapes. For regulatory information please refer to Moplen HP456J Product Stewardship Bulletin (PSB).

General

Material Status	• Commercial: Active		
Literature ¹	<ul style="list-style-type: none"> • Processing - Extrusion (English) • Processing - Injection Molding (English) • Processing - Mold Shrink (English) • Technical Datasheet (English) 		
Search for UL Yellow Card	<ul style="list-style-type: none"> • LyondellBasell Industries • Moplen 		
Availability	• Africa & Middle East	• Europe	
Features	• Homopolymer	• Low Water Carryover	
Uses	• Monofilaments	• Strapping	• Thermoforming Applications
	• Rope	• Tape	
Processing Method	• Extrusion	• Thermoforming	

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	3.4 g/10 min	3.4 g/10 min	ISO 1133

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Stress			ISO 527-2
Yield	4930 psi	34.0 MPa	
Break	3340 psi	23.0 MPa	
Tensile Strain			ISO 527-2
Yield	11 %	11 %	
Break	> 500 %	> 500 %	
Flexural Modulus	203000 psi	1400 MPa	ISO 178

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	1.9 ft·lb/in ²	4.0 kJ/m ²	ISO 179
Charpy Unnotched Impact Strength 73°F (23°C)	90 ft·lb/in ²	190 kJ/m ²	ISO 179

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Heat Deflection Temperature 66 psi (0.45 MPa), Unannealed	194 °F	90.0 °C	ISO 75-2/B
Vicat Softening Temperature			
--	307 °F	153 °C	ISO 306/A50
--	199 °F	93.0 °C	ISO 306/B50

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.

