



## Moplen EP445L

### Polypropylene, Impact Copolymer

#### Product Description

Moplen EP445L is a heterophasic copolymer suitable for the production of beverage closures using both compression and injection moulding technologies. The resin is nucleated and additivated with both slip and antistatic whilst exhibiting a good stiffness and impact strength. Additional applications for this resin include housewares and medium-sized containers. For regulatory information please refer to Moplen EP445L Product Stewardship Bulletin ( PSB )

#### Product Characteristics

<b>Status</b>	Commercial: Active
<b>Test Method used</b>	ISO
<b>Availability</b>	Europe, Africa-Middle East
<b>Processing Methods</b>	Compression Molding, Injection Molding
<b>Features</b>	Block Copolymer, Good Impact Resistance , Nucleated, Unspecified Slip, Good Stiffness
<b>Typical Customer Applications</b>	Caps & Closures, Housewares, Sports, Leisure and Toys

Typical Properties	Method	Value	Unit
<b>Physical</b>			
Density	ISO 1183	0.9	g/cm <sup>3</sup>
Melt flow rate (MFR) (230°C/2.16Kg)	ISO 1133	6.0	g/10 min
<b>Mechanical</b>			
Tensile Modulus	ISO 527-1, -2	1500	MPa
Tensile Stress at Yield	ISO 527-1, -2	30	MPa
Tensile Strain at Break	ISO 527-1, -2	>50	%
Tensile Strain at Yield	ISO 527-1, -2	7.0	%
<b>Impact</b>			
Charpy notched impact strength	ISO 179		
(23 °C, Type 1, Edgewise, Notch A)		5.5	kJ/m <sup>2</sup>
(0 °C, Type 1, Edgewise, Notch A)		3.5	kJ/m <sup>2</sup>
(-20 °C, Type 1, Edgewise, Notch A)		2.5	kJ/m <sup>2</sup>
<b>Hardness</b>			
Ball indentation hardness (H 358/30)	ISO 2039-1	64	MPa
<b>Thermal</b>			
Heat deflection temperature B (0.45 MPa) Unannealed	ISO 75B-1, -2	100	°C
Vicat softening temperature A/50	ISO 306	151	°C
Vicat softening temperature B/50	ISO 306	80	°C

#### Notes

Typical properties; not to be construed as specifications.