

# 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**

Commercial: Active Status

**Test Method used** ISO

**Availability** Europe, Africa-Middle East

**Processing Methods** Compression Molding, Injection Molding

**Features** Block Copolymer, Good Impact Resistance , Nucleated,

Unspecified Slip, Good Stiffness

**Typical Customer Applications** Caps & Closures, Housewares, Sports, Leisure and Toys

Typical Properties	Method	Value	Unit
Physical			
Density	ISO 1183	0.9	g/cm³
Melt flow rate (MFR) (230°C/2.16Kg)	ISO 1133	6.0	g/10 min
Mechanical			
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	%
Impact			
Charpy notched impact strength	ISO 179		
(23 °C, Type 1, Edgewise, Notch A)		5.5	kJ/m²
(0 °C, Type 1, Edgewise, Notch A)		3.5	kJ/m²
(-20 °C, Type 1, Edgewise, Notch A)		2.5	kJ/m²
Hardness			
Ball indentation hardness (H 358/30)	ISO 2039-1	64	MPa
Thermal			
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.