

Technical Data Sheet

Moplen EP445L



Polypropylene, Impact Copolymer

Product Description

Moplen EP445L is a polypropylene impact copolymer with medium melt flow rate, suitable for compression and injection molding processes.

Moplen EP445L exhibits a good stiffness and impact strength balance, high stress cracking resistance and low stress whitening behaviour.

Moplen EP445L is nucleated, for faster crystallization rate and increased productivity. It contains both slip and antistatic additives, for easier demolding and low coefficient of friction.

Moplen EP445L is typically used in caps and closures. Other typical applications are in the field of housewares, toys and rigid packaging.

This grade is not intended for medical and pharmaceutical applications.

Application	Caps & Closures; Housewares; Sports, Leisure & Toys
Market	Consumer Products; Rigid Packaging
Processing Method	Compression Molding; Injection Molding
Attribute	Impact Copolymer; Medium Impact Resistance; Medium Slip; Medium Stiffness; Nucleated

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (230 °C/2.16 kg)	6	g/10 min	ISO 1133-1
Density, (23 °C)	0.90	g/cm ³	ISO 1183-1
Mechanical			
Tensile Modulus	1500	MPa	ISO 527-1, -2
Tensile Stress at Yield	30	MPa	ISO 527-1, -2
Tensile Strain at Break	>50	%	ISO 527-1, -2
Tensile Strain at Yield	7	%	ISO 527-1, -2
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	8.5	kJ/m ²	ISO 179
(0 °C, Type 1, Edgewise, Notch A)	4.5	kJ/m ²	ISO 179
(-20 °C, Type 1, Edgewise, Notch A)	3.5	kJ/m ²	ISO 179
Hardness			
Ball Indentation Hardness, (H 358/30)	64	MPa	ISO 2039-1
Thermal			
Vicat Softening Temperature, (A50)	151	°C	ISO 306
Heat Deflection Temperature B, (0.45 MPa, Unannealed)	100	°C	ISO 75B-1, -2