



Moplen EP440G

Polypropylene, Impact Copolymer

Product Description

Moplen EP440G is a nucleated heterophasic copolymer especially developed for extrusion applications. Moplen EP440G exhibits high stiffness, very high impact properties at room and sub-zero temperatures, good dimensional stability and excellent creep and deforming resistance. The main applications of Moplen EP440G are thermoforming, corrugated board and extrusion blow moulding.

Product Characteristics

Status	Commercial: Active
Test Method used	ISO ASTM
Processing Methods	Extrusion Blow Molding, Extrusion Thermoforming
Features	High Impact Resistance , Low Temperature Impact Resistance, High Stiffness
Typical Customer Applications	Corrugated Sheet, Crates, Panels & Profiles

Typical Properties	Method	Value	Unit
Physical			
Density	ISO 1183	0.9	g/cm ³
Melt flow rate (MFR) (230°C/2.16Kg)	ISO 1133	1.3	g/10 min
Melt volume flow rate (230°C/2.16Kg)	ISO 1133	1.8	cm ³ /10min
Mechanical			
Tensile Modulus	ISO 527-1, -2	1450	MPa
Tensile Stress at Yield	ISO 527-1, -2	27	MPa
Tensile Strain at Break	ISO 527-1, -2	>50	%
Tensile Strain at Yield	ISO 527-1, -2	8	%
Impact			
Charpy unnotched impact strength	ISO 179		
(23 °C, Type 1, Edgewise)		No Break	kJ/m ²
(0 °C, Type 1, Edgewise)		No Break	kJ/m ²
(-20 °C, Type 1, Edgewise)		190	kJ/m ²
Charpy notched impact strength	ISO 179		
(23 °C, Type 1, Edgewise, Notch A)		40	kJ/m ²
(0 °C, Type 1, Edgewise)		9	kJ/m ²
(-20 °C, Type 1, Edgewise)		7	kJ/m ²
Ductile/Brittle transition temperature	ISO 6603-2	-55	°C
Hardness			
Ball indentation hardness ((H358/30))	ISO 2039-1	48	°C
Thermal			
Heat deflection temperature B (0.45 MPa) Unannealed	ISO 75B-1, -2	78	°C
Vicat softening temperature A/50	ISO 306	150	°C
Vicat softening temperature B/50	ISO 306	66	

Additional Properties

Gloss at 60°, DIN 67530: 65%

Notes

Typical properties; not to be construed as specifications.