Technical Data Sheet

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.

This grade is not intended for medical and pharmaceutical applications.

Application	Corrugated Sheet; Crates; Panels & Profiles
Market	Consumer Products; Rigid Packaging
Processing Method	Extrusion Blow Molding; Sheet and Profile Extrusion; Thermoforming
Attribute	High Impact Resistance; High Stiffness; Impact Copolymer; Low Temperature Impact Resistance

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (230 °C/2.16 kg)	1.3	g/10 min	ISO 1133-1
Density	0.90	g/cm³	ISO 1183-1
Mechanical			
Tensile Modulus	1400	MPa	ISO 527-1, -2
Tensile Stress at Yield	27	MPa	ISO 527-1, -2
Tensile Strain at Break	>50	%	ISO 527-1, -2
Tensile Strain at Yield	8	%	ISO 527-1, -2
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	40	kJ/m²	ISO 179
(0 °C, Type 1, Edgewise, Notch A)	10	kJ/m²	ISO 179
(-20 °C, Type 1, Edgewise, Notch A)	7	kJ/m²	ISO 179
Ductile/Brittle Transition Temperature	-55	°C	ISO 6603-2
Hardness			
Ball Indentation Hardness, (H 358/30)	48	MPa	ISO 2039-1
Thermal			
Vicat Softening Temperature			
(A/50)	150	°C	ISO 306
(B50)	66	°C	ISO 306
Heat Deflection Temperature B, (0.45 MPa, Unannealed)	78	°C	ISO 75B-1, -2
Optical			
Gloss, (60°, 50 µm)	65	%	DIN 67530