

Technical Data Sheet

CirculenRecover EP445PR



Polypropylene, Impact Copolymer

Product Description

CirculenRecover EP445PR is a polypropylene-based impact copolymer containing 30% post-consumer recycled (PCR) resin. CirculenRecover EP445PR is typically used in injection molding applications and offers excellent cold temperature impact resistance and stiffness/impact balance.

Application	Caps & Closures; Containers; Crates
Market	Consumer Products; Rigid Packaging
Processing Method	Injection Molding
Attribute	Contains Antistat; Good Mold Release; Low Temperature Impact Resistance; Nucleated

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
Physical					
Melt Flow Rate, (230 °C/2.16 kg)	17	g/10 min	17	g/10 min	ASTM D1238
Density, (23 °C)	0.90	g/cm ³	0.90	g/cm ³	ASTM D792
Mechanical					
Flexural Modulus					
(0.05 in/min, 1% Secant, Procedure A)	160000	psi			ASTM D790
(1.3 mm/min, 1% Secant, Procedure A)			1100	MPa	ASTM D790
Tensile Strength at Yield					
(2 in/min)	3400	psi			ASTM D638
(50 mm/min)			23	MPa	ASTM D638
Tensile Elongation at Yield	6.5	%	6.5	%	ASTM D638
Impact					
Notched Izod Impact Strength					
(73 °F, Method A)	2.1	ft-lb/in			ASTM D256
(23 °C, Method A)			112	J/m	ASTM D256
Thermal					
Deflection Temperature Under Load					
(66 psi, Unannealed)	189	°F			ASTM D648
(0.45 MPa, Unannealed)			87	°C	ASTM D648