TotalEnergies

TotalEnergies Petrochemicals & Refining USA, Inc.
Polymers Americas

Polypropylene 4820WZ

Technical Data Sheet
Polypropylene – Impact Copolymer
Produced in the United States

Description

Polypropylene 4820WZ is a nucleated impact copolymer with a Melt Flow of 35 g/10min.

4820WZ is characterized by improved stiffness, creep resistance, high impact resistance, excellent antistatic properties and has been formulated to allow faster cycling through early demolding.

4820WZ has been developed specifically for the injection molding of garden furniture, housewares, thin-walled articles, and compounding.

Characteristics

	Method	Unit	Typical Value
Rheological Properties			
Melt Flow	D-1238	g/10 min	35
Mechanical Properties			
Tensile Strength at Yield	D-638	psi (MPa)	4,000 (28)
Elongation at Yield	D-638	%	6
Flexural Modulus	D-790	psi (MPa)	200,000 (1,380)
Izod Impact (Notched) @ 23ºC @ -20ºC	 D-256 D-256	 ft-lb/in (J/m) ft-lb/in (J/m)	 1.5 (80) 0.7 (37)
Charpy Impact Strength @ 23˚C @ -20˚C	 DIN 53453 DIN 53453	 ft-lb/in^2 (kJ/m^2) ft-lb/in^2 (kJ/m^2)	 4.5 (9.5) 2.1 (4.5)
Thermal Properties(1)			
Melting Range	DSC(2)	˚F (˚C)	320-329 (160-165)
Heat Deflection	D-648	˚F (˚C)	212 (100)
Other Physical Properties			
Density	D-1505	g/cm^3	0.905

(1) Data developed under laboratory conditions and are not to be used as specification, maxima or minima.
(2) MP determined with a DSC-2 Differential Scanning Calorimeter. Test procedure available upon request.

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Polypropylene

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All tests were run under laboratory conditions. ASTM (where applicable) testing procedures. The data are intended as a general guide only and do not necessarily represent results that may be obtained elsewhere. The use of TotalEnergies products must be guided by the users own methods for selection of proper formulation. TotalEnergies Petrochemicals & Refining USA Inc. disclaims any responsibility for misuse or misapplication of its products. TotalEnergies MAKES NO WARRANTY OF MERCHANTABILITY AND THERE IS NO WARRANTY THAT GOODS SUPPLIED SHALL BE FIT FOR ANY PARTICULAR PURPOSE. TotalEnergies' liability and customer's exclusive remedy for any claims arising out of sales of its products are expressly limited at customer option to replacement of non-performing goods or payment not to exceed the purchase price plus transportation charges thereon in respect to any material which damage is claimed.