



**TotalEnergies**

TotalEnergies Petrochemicals & Refining USA, Inc.  
Polymers Americas

**Polypropylene 7823M**

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

### Description

**Clarity:** Polypropylene 7823M exhibits superior clarity and produces molded parts with improved impact compared with parts molded from homopolymer polypropylene.

**Easy Flow:** 7823M exhibits exceptionally easy flow characteristics.

**FDA:** 7823M complies with all applicable FDA and USDA regulations and may be used under these provisions for food contact and packaging.

**Processing:** 7823M resin processes on conventional injection molding equipment with typical melt temperatures of 350°F-450°F (177°C-232°C).

### Characteristics

	Method	Unit	Typical Value
<b>Rheological Properties</b>			
Melt Flow	D-1238 Condition "L"	g/10 min	30
<b>Mechanical Properties</b>			
Tensile	D-638	psi (MPa)	4,300 (30)
Elongation	D-638	%	11
Tensile Modulus	D-638	Psi (MPa)	160,000 (1,105)
Flexural Modulus	D-638	psi (MPa)	140,000 (965)
Izod Impact @ 73°F			
Notched	D-256A	ft.-lbs/in. (J/m)	1.4 (75)
Unnotched		ft.-lbs/in. (J/m)	No Break
Haze, 0.04" plaques	D-1002	%	9
Hardness	D-1706 D-785A	Shore D Rockwell R	76 84
Drop Impact, 0.125" plaques	API <sup>(3)</sup>	in.lbs. (J)	155 (18)
<b>Thermal Properties<sup>(1)(2)</sup></b>			
Melting Point	DSC	°F (°C)	293 (143)
Heat Deflection			
@ 66 Psi	D-648	°F	190
@ 4.64 kg/cm <sup>2</sup>		°C	88
<b>Other Physical Properties</b>			
Density	D-1505	g/cc	0.900

(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.  
(3) Test procedure available upon request.

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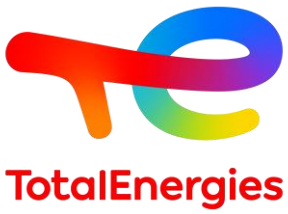
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All tests were run under laboratory conditions. ASTM (where applicable) testing procedures. The data are intended as a general guide only and do not necessarily represent results that may be obtained elsewhere. The use of TotalEnergies products must 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.

Polypropylene



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