



TotalEnergies

TotalEnergies Petrochemicals & Refining USA, Inc.
Polymers Americas

Polypropylene 7844CR

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

Polypropylene

Description

Polypropylene 7844CR resist the embrittlement and yellowing after effective doses of sterilizing radiation.

Impact: 7844CR produces molded parts with high impact compared with parts molded from other random copolymers.

Easy Flow: 7844CR exhibits exceptionally easy flow characteristics.

FDA: 7844CR complies with all applicable FDA regulations for food contact applications.

Lubricated: 7844CR contains a lubricant for improved demolding.

Recommended Applications: 7844CR is recommended for injection molding medical devices, housewares, hinged closures and other items calling for good impact, flexibility and good clarity.

Processing: 7844CR resin processes on conventional injection molding equipment with typical melt temperatures of 390-450°F (200-232°C).

Made to Order Grade: Two railcar minimum order; take or pay agreement required; 90-day minimum lead time

Characteristics

	Method	Unit	Typical Value
Rheological Properties			
Melt Flow	D-1238	g/10 min	27
Mechanical Properties			
Elongation	D-638	%	10
Tensile Modulus	D-638	Psi (MPa)	125,000 (860)
Flexural Modulus	D-790	psi (MPa)	100,000 (690)
Tensile Strength at Yield	D-638	psi (MPa)	3250 (22.4)
Izod Impact @ 73°F Notched	D-256A	ft.-lbs/in. (J/m)	0.9 (48)
Drop Impact, 0.125" plaques	D-5420	In.-lbs. (J)	200 (23)
Hardness	D-288A	Rockwell R	62
Thermal Properties⁽¹⁾			
Melting Point	DSC ⁽²⁾	°F (°C)	293(145)
Heat Deflection °F @ 66 °C @ 4.64	D-648	psi kg/cm ²	162 72
Other Physical Properties			
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.

Rev: Sept 2023

TOTALENERGIES PETROCHEMICALS & REFINING USA, INC.
POLYMERS AMERICAS
1201 Louisiana Street
Suite 1800
Houston, TX 77002
www.polymers.totalenergies.com

TECHNICAL CENTER
P.O. Box 1200
Deer Park, Texas 77536
Phone: 281-884-7500

1-800-344-3462

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.