

Melt Strength. The high melt strength of TOTAL Polypropylene 3281 allows uniform draw down during processing, resulting in maximum line speeds and a good balance of physical properties.

Process Stability. Excellent polymer stability of TOTAL Polypropylene 3281 produces consistent product properties during extrusion, even with the use of regrind.

FDA. TOTAL Polypropylene 3281 complies with all applicable FDA regulations and may be used under these provisions for food contact applications.

Recommended Applications. TOTAL Polypropylene 3281 is recommended for sheet and strapping applications where high melt strength and high extrusion speeds are required.

Processing. TOTAL Polypropylene 3281 resin processes on conventional extrusion equipment with typical melt temperatures of 390-450°F (200-232°C). Call the nearest TOTAL Polypropylene Sales Office for additional information.

<u>Resin Properties</u>	<u>Typical Values</u>	<u>ASTM Methods</u>
Melt Flow, g/10 min. "L"	1.25	D-1238 Condition
Density, g/cc	0.905	D-1505
Melting Point, °F °C	330	DSC ⁽²⁾
	165	
<u>Mechanical Properties</u>		
Tensile @ Yield, psi (M Pa)	4,900 (34.0)	D-638
Elongation, %	8.0	D-638
Tensile Modulus, psi (M Pa)	220,000 (1.515)	D-638
Flexural Modulus, psi (M Pa)	200,000 (1,380)	D-790
Izod Impact @ 73°F		D-256A
Notched - ft.lb./in. (J/m)	0.8 (42.0)	
Unnotched - ft.lb./in. (J/m)	30.0 (1,590)	
Hardness		
Shore D	81	D-1706
Rockwell R	90	D-785A
<u>Thermal Properties</u>		
Heat Deflection		D-648
°F @ 66 psi	220	
°C @ 4.64 kg/cm ²	104	
Coefficient of Linear Thermal Expansion		D-696
in./in./°F x 10 ⁻⁵	5.6	
cm/cm/°C x 10 ⁻⁵	10	

(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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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 TOTAL products must be guided by the users own methods for selection of proper formulation. TOTAL PETROCHEMICALS USA, INC. disclaims any responsibility for misuse or miss application of its products. TOTAL MAKES NO WARRANTY OF MERCHANTABILITY AND THERE IS NO WARRANTY THAT GOODS SUPPLIED SHALL BE FIT FOR ANY PARTICULAR PURPOSE. TOTAL'S 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.