

## Description

**Characteristics:** HDPE 50100.2: Good melt strength, Excellent stress cracking resistance, good stiffness, excellent impact strength, exceptional forming characteristics.

**Applications:** 50100.2 is recommended for sheet extrusion, thermoforming, truck bed liners, dunnage containers, large part formed articles.

## Characteristics

	Method	Unit	Typical Value
<b>Rheological Properties<sup>(1)</sup></b>			
Melt Flow Index	D-1238	g/10 min	
190°C/21.6 kg (HLMI)			9.5
<b>Mechanical Properties<sup>(1)(2)</sup></b>			
Tensile Strength @ Yield	D 638, Type IV specimen, 2 in/min	psi	3,800
Elongation at Break	D 638, Type IV specimen, 2 in/min	%	600
Flexural Modulus @ 2% strain	D 790	psi	175,500
Notched Izod Impact Strength	D256, 1/8-in. thick specimen	ft-lb/in	10.0
ESCR <sup>(3)</sup> F <sub>50</sub>	D 1693, Cond. B 100% Igepal	hrs	>600
<b>Thermal Properties<sup>(1)</sup></b>			
Heat Distortion Temperature	D 648	°F	172
Thermal Expansion	D 696	in/in/°F	1×10 <sup>-4</sup>
Melting Point	D-3417	°F	260
<b>Processing Recommendations</b>			
Extrusion Melt Temperature		°F	390 - 480
Thermoforming Surface Temperature	F 1248	°F	310 - 360
<b>Other Physical Properties</b>			
Density	D-792	g/cm <sup>3</sup>	0.950
<b>Classifications</b>			
Meets GMP.PE.007 (General Motors) and ESA-M4D197-A (Ford)			

- (1) Data developed under laboratory conditions and are not to be used as specification, maxima or minima.
- (2) The data listed was determined on press molded specimens and may, therefore, vary from specimens taken from extruded sheet or formed products.
- (3) Environmental Stress Crack Resistance (ESCR)

HDPE 50100.2 Sheet 06/2015



TOTAL PETROCHEMICALS & REFINING  
 USA, INC.  
[www.totalrefiningchemicals.com](http://www.totalrefiningchemicals.com)  
 1201 Louisiana Street  
 Suite 1800  
 Houston, TX 77002

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 TOTAL products must be guided by the users own methods for selection of proper formulation. TOTAL PETROCHEMICALS & REFINING 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.

