



## DuraPET ULTRA™ 1080

### Product Description

DuraPET ULTRA™ 1080 is a modified PET material that demonstrates extreme high impact, extremely low notch sensitivity, and wear characteristics. It is a highly durable material that can withstand outdoor environmental conditions. It exhibits ductile failure as low as - 40°C and can withstand higher temperatures above 180°C.

### General

**Material Status:** PRELIMINARY

**Availability:** Globally

**Features:** Low Crystallinity/Extreme High Toughness

**Uses:** Multiple

**Processing Method:** Injection Molding, Extrusion, Thermoforming, Blown Film

### ASTM & ISO Properties

<b>Physical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Density	1.29	g/cc	ISO 1183
Molding Shrinkage	0.60	%	ISO 294-4
<b>Mechanical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Tensile Modulus	325,720	psi	ASTM D638
Tensile Strength	7,640	psi	ASTM D638
Flexural Modulus	336,000	psi	ASTM D790
Elongation @ Break	350	%	ASTM D638
<b>Impact</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Gardner Impact (23°C)	>500	in-lb	ASTM D5420
Gardner Impact (- 40°C)	>290	in-lb	ASTM D5420
Notched Izod (23°C)	15	Ft-lb/in	ASTM D256
<b>Rheological</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Melt Flow Rate (285°C, 2.16 Kg)	12	g/10 min	ASTM D1238

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