





# 63B072S.DEV - High-Density Polyethylene Resin

## Technical Data Sheet

 **Product Description**  
Shell Polymers HDPE 63B072S is a high molecular weight homopolymer with excellent stiffness, toughness.

 **Highlights**  
■ Designed for sheet extrusion applications.

Resin Properties	Method	Nominal Value
Density	ASTM D792	0.963 g/cm <sup>3</sup>
Melt Index (190 °C / 2.16 kg)	ASTM D1238	0.72 g/10 min

Mechanical Properties	Method	Nominal Value (English)	Nominal Value (SI)
Tensile Strength at Yield	ASTM D638	4700 psi	32 MPa
Tensile Strength at Break	ASTM D638	2600 psi	18 MPa
Tensile Elongation at Yield	ASTM 638	8.0%	8.0%
Tensile Elongation at Break	ASTM 638	>600%	>600%
Flexural Modulus 1% Secant <sup>(b)</sup>	ASTM D790	237,000 psi	1635 MPa
Flexural Modulus 2% Secant	ASTM D790B	203,000 psi	1400 MPa

Thermal Properties	Method	Nominal Value (English)	Nominal Value (SI)
Peak Melting Temperature		273 °F	134 °C
Peak Crystallization Temperature		248 °F	120 °C

### Notes:

Typical properties only. Not to be construed as specifications. Users should confirm results by performing their own tests.  
Plaques molded in accordance with ASTM D4703C  
<sup>(a)</sup>Tensile properties tested on Type IV specimens

### Regulatory Statement:

- Complies with U.S. FDA 21 CFR 177.1520 (c) 2.1 or 2.2
- Consult the Regulatory Data Sheet for more details. It is available upon request. Please contact your Account Manager.

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