



63B072.DEV - High-Density Polyethylene Resin

Technical Data Sheet



Product Description

Shell Polymers HDPE 63B072 is a high molecular weight homopolymer exhibiting the characteristics of stiffness, toughness, low taste and odor, and processability for dairy and nutritional packaging.



Highlights

- Designed for extrusion blow molding.
- Suitable for use in milk, water and juice packaging.
- Slurry loop technology.

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

Mechanical Properties	Method	Nominal Value (English)	Nominal Value (SI)
Tensile ^(b) Strength at Yield	ASTM D638	4700 psi	32 MPa
Tensile ^(b) Strength at Break	ASTM D638	2600 psi	18 MPa
Tensile ^(b) Elongation at Yield	ASTM 638	8.0%	8.0%
Tensile ^(b) Elongation at Break	ASTM 638	>600%	>600%
Flexural Modulus 1% Secant	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

^(a)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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