

Technical Data

Product Description

This high molecular weight, ethylene-hexene copolymer is tailored for lightweight blow molded containers that require:

- Excellent stiffness
- Exceptional processability
- Durability
- Recyclability

Typical blow molded applications for HHM 5502BN include:

- Ice chests and coolers
- Household and industrial chemical containers
- Food packaging
- Pharmaceuticals

This resin meets these specifications:

- ASTM D4976 - PE 235
- FDA 21 CFR 177.1520(c) 3.2a, use conditions B through H per Table 2 off 21 CFR 176.170(c)
- Listed in the Drug Master File

General

Material Status	• Commercial: Active
Literature ¹	• Technical Datasheet (English)
Search for UL Yellow Card	• Chevron Phillips Chemical Company LLC • Marlex®
Availability	• Europe • Latin America • North America
Features	• Copolymer • Durable • Excellent Processability • Food Contact Acceptable • Hexene Comonomer • High Molecular Weight • High Stiffness • Recyclable Material
Uses	• Blown Containers • Containers • Food Packaging • Industrial Containers • Pharmaceuticals
Agency Ratings	• ASTM D 4976-PE235 • DMF Unspecified Rating • FDA 21 CFR 176.170(c), Table 2 ² • FDA 21 CFR 177.1520(c) 3.2a
Forms	• Pellets
Processing Method	• Blow Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.955 g/cm ³	0.955 g/cm ³	ASTM D1505
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	0.35 g/10 min	0.35 g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR)			ASTM D1693B
100% Igepal, F50	35.0 hr	35.0 hr	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength ⁴ (Yield)	3920 psi	27.0 MPa	ASTM D638
Tensile Elongation ⁴ (Break)	600 %	600 %	ASTM D638
Flexural Modulus - Tangent ⁵	199000 psi	1370 MPa	ASTM D790
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Brittleness Temperature	< -103 °F	< -75.0 °C	ASTM D746A



Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² use conditions B through H

³ Typical properties: these are not to be construed as specifications.

⁴ Type IV, 2.0 in/min (51 mm/min)

⁵ 0.50 in/min (13 mm/min)

