High Density Polyethylene Chevron Phillips Chemical Company LLC

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 Ai	merica •	North America
Features	Copolymer Durable Excellent Processability	ontact Acceptable comonomer olecular Weight	High Stiffness Recyclable Material
Uses	Blown Containers Food P Containers Industri	ackaging al Containers	Pharmaceuticals
Agency Ratings	ASTM D 4976-PE235 DMF Unspecified Rating FDA 21 2 ² FDA 21 FDA 21	CFR 176.170(c), Table 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 D	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Brittleness Temperature	< -103 °F	< -75.0 °C	ASTM D746A



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Marlex® HHM 5502BN

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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)



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