



**POLYETHYLENE
DATA SHEET**

Marlex[®] HHM 5502 BN

High Density Ethylene Hexene Copolymer

CUSTOMER BENEFITS

This resin allows the blow molder to reduce inventory of resin types, because it can be used to package bleach and most detergents.

Compare this with other blow molding or thermoforming resins of the same stiffness...

- Excellent stiffness
- Exceptional stress cracking resistance

SUGGESTED APPLICATIONS

Bottles for...

- Bleach and detergents
- Industrial chemicals
- Industrial parts
- Pharmaceuticals

PROCESSING RECOMMENDATIONS

Maintain these conditions for optimum part quality...

- Blow Molding Stock Temperature:
340-400°F (171-204°C)
- Extrusion Melt Temperature
380-450°F (194-216°C)
- Thermoforming Surface Temperature:
340-360°F (171-182°C)

SPECIFICATION DATA

Meets these requirements...

- ASTM D4976 - PE 235
- FDA Regulation 177.1520. Suitable for food packaging.
- Listed in Drug Master File



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Nominal Physical Properties of Marlex® HHM 5502 BN

PROPERTY*	TEST METHOD	ENGLISH		SI	
		Unit	Value	Unit	Value
Density	D1505	lbs/ft ³	60	g/cc	0.955
Melt Index, Condition 190/2.16	D1238	g/10 min.	0.35	g/10 min.	0.35
ESCR, Condition A, F ₅₀ } 100% Igepal)CO-630 Condition B, F ₅₀ } 100% Igepal)CO-630	D1693	h	45	h	45
			35		35
Tensile Yield Strength, 2" (50 mm) per min.	D638 Type IV	psi	4000	MPa	28
Ultimate Elongation 2" (50 mm) per min.	D638 Type IV	%	>600	%	>600
Brittleness Temperature	D746	°F	< -94	°C	< -70
Flexural Modulus	D790	psi	200,000	MPa	1378
Bottles					
Bottles Environmental Stress Cracking Resistance, 140°F (60°C), F ₅₀ **		h	250	h	250
Thermoforming					
Sheet Sag***		in	7-9	cm	18-23

* Physical properties reported herein were determined on compression molded specimens prepared in accordance with Procedure C of ASTM D1928.

** Test Conditions: 10 ounce, 23-gram bottle, 10% fill, Joy Dishwashing Liquid.

*** 2 ft. X 4 ft. x 125 mil (0.61m x 1.22m x 3.2mm) thick blank heated to forming temperature.

THE NOMINAL PROPERTIES REPORTED HEREIN ARE TYPICAL OF THE PRODUCT BUT DO NOT REFLECT NORMAL TESTING VARIANCE AND THEREFORE SHOULD NOT BE USED FOR SPECIFICATION PURPOSES.

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