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PREMIUM EXTRUSION AND RIGID PACKAGING RESINS

Marlex® HXB TR-512 Polyethylene

HIGH DENSITY POLYETHYLENE (HDPE)

This broad distribution, extra high molecular weight ethylene-hexene copolymer is tailored for large containers that require:

- Outstanding impact resistance
- Outstanding creep resistance
- Excellent ESCR
- Excellent chemical resistance
- Durability

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 of 21 CFR 176.170(c)
- Listed in the Drug Master File

Typical blow molded applications for HXB TR-512 include:

- 55-gallon drums
- Industrial tanks

NOMINAL PHYSICAL PROPERTIES ⁽¹⁾	English	SI	Method
Density	---	0.954 g/cm ³	ASTM D1505
Flow Rate (HLM1, 190 °C/21.6 kg)	---	5.5 g/10 min	ASTM D1238
Tensile Strength at Yield , 2 in/min, Type IV bar	4,200 psi	29.0 MPa	ASTM D638
Elongation at Break , 2 in/min, Type IV bar	800 %	800 %	ASTM D638
Flexural Modulus , Tangent - 16:1 span:depth, 0.5 in/min	195,000 psi	1,340 MPa	ASTM D790
ESCR , Condition B (100 % Igepal), F ₅₀	> 1,000 h	> 1,000 h	ASTM D1693
Durometer Hardness , Type D (Shore D)	60	60	ASTM D2240
Vicat Softening Temperature , Loading 1, Rate A	259 °F	126 °C	ASTM D1525
Heat Deflection Temperature , 66 psi, Method A	165 °F	74 °C	ASTM D648
Brittleness Temperature , Type A, Type I specimen	< -103 °F	< -75 °C	ASTM D746
Tensile Impact , Type S bar	215 ft•lb/in ²	450 kJ/m ²	ASTM D1822

1. 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. Values are rounded. The physical properties were determined on compression molded specimens that were prepared in accordance with Procedure C of ASTM D4703, Annex A1.

