Marlex Polyethylene

PREMIUM EXTRUSION AND RIGID PACKAGING RESINS

Marlex® HXB TR-494 Polyethylene

HIGH DENSITY POLYETHYLENE (HDPE)

This broad molecular weight distribution, extra-high molecular weight, ethylene-hexene copolymer is tailored for corrugated pipe applications that require excellent:

- Melt strength
- Pipe stiffness
- Creep resistance
- Impact resistance
- Slow Crack Growth Resistance
- Chemical resistance

Typical corrugated pipe applications for HXB TR-494 include:

- Roadway culverts
- Storm sewers
- Land drainage
- Conduit/Duct

This resin meets these specifications:

- ASTM D4976 – PE 235
- AASHTO M 294
- AASHTO M 252
- ASTM D3350, Cell Class PE445640A

Nominal Resin Properties(1)	English	SI	Method
Density	---	0.954 g/cm^3	ASTM D1505
Flow Rate (HLMI, 190 °C/21.6 kg)	---	5.5 g/10 min	ASTM D1238
Flexural Modulus, 2 % Secant, 16:1 span:depth, 0.5 in/min	155,000 psi	1,340 MPa	ASTM D790
Tensile Strength at Yield, 2 in/min, Type IV bar	4,200 psi	29 MPa	ASTM D638
Tensile Elongation at Break, 2 in/min, Type IV bar	800 %	800 %	ASTM D638
ESCR, Condition B, (10 % Igepal), F_{10}	> 1000 h	> 1000 h	ASTM D1693
ESCR, Condition C, (100 % Igepal), F_{20}	> 600 h	> 600 h	ASTM D1693
NCLS, 15 % of the reference yield stress of 4,000 psi	> 24 h	> 24 h	ASTM F2136

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.

Chevron Phillips CHEMICAL