Marlex Polyethylene

PREMIUM EXTRUSION AND RIGID PACKAGING RESINS

Marlex® 9035 Polyethylene

HIGH DENSITY POLYETHYLENE (HDPE)

This high density polyethylene is an ethylene-hexene copolymer that is tailored for injection molded applications that require:

- Excellent flow
- Moderate impact strength
- Good stiffness
- Durability

Typical injection molded applications for 9035 include:

- Thin wall food containers
- Toys

This resin meets these specifications:

- ASTM D4976 - PE 231
- FDA 21 CFR 177.1520(c) 3.2a, use conditions B through H per 21 CFR 176.170(c)

Nominal Physical Properties[1]	English	SI	Method
Density	---	0.952 g/cm^3	ASTM D1505
Flow Rate (MI, 190 °C/2.16 kg)	---	40.0 g/10 min	ASTM D1238
Tensile Strength at Yield, 2 in/min, Type IV bar	3,470 psi	24 MPa	ASTM D638
Elongation at Break, 2 in/min, Type IV bar	< 100 %	< 100%	ASTM D638
Flexural Modulus, Tangent - 16:1 span:depth, 0.5 in/min	142,000 psi	979 MPa	ASTM D790
ESCR, Condition B (100 % Igepal), F_{50}	< 10 h	< 10 h	ASTM D1693
Vicat Softening Temperature, Loading 1, Rate A	239 °F	115 °C	ASTM D1525
Brittleness Temperature, Type A, Type I specimen	< -103 °F	< -75 °C	ASTM D746

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