Marlex® Polyethylene

PREMIUM EXTRUSION AND RIGID PACKAGING RESINS

Marlex® 9708 Polyethylene

HIGH DENSITY POLYETHYLENE (HDPE)

This ethylene homopolymer is tailored for injection molded applications that require:

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

This resin meets these specifications:

- ASTM D4976 - PE 243
- FDA 21 CFR 177.1520(c) 3.2a, use conditions B through H per 21 CFR 176.170(c)

Typical injection molded applications for 9708 include:

- Crates
- Tote boxes
- Structural foam

Nominal Physical Properties[1]	English	SI	Method
Density	---	0.962 g/cm^3	ASTM D1505
Flow Rate (MI, 190 °C/2.16 kg)	---	8.0 g/10 min	ASTM D1238
Tensile Strength at Yield, 2 in/min, Type IV bar	4,700 psi	32 MPa	ASTM D638
Tensile Elongation at Break, 2 in/min, Type IV bar	800 %	800 %	ASTM D638
Flexural Modulus, Tangent - 16:1 span:depth, 0.5 in/min	230,000 psi	1,580 MPa	ASTM D790
ESCR, Condition B (100 % Igepal), F_{50}	< 10 h	< 10 h	ASTM D1693
Durometer Hardness, Type D (Shore D)	66	66	ASTM D2240
Vicat Softening Temperature, Loading 1, Rate A	261 °F	127 °C	ASTM D1525
Heat Deflection Temperature, 66 psi, Method A	185 °F	85 °C	ASTM D648
Heat Deflection Temperature, 264 psi, Method A	126 °F	52 °C	ASTM D648
Brittleness Temperature, Type A, Type I specimen	< -103 °F	< -75 °C	ASTM D746
Izod Impact, notched, 73 °F (23 °C)	0.8 ft•lb/in	40 J/m	ASTM D256

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