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SUPERIOR FLEXIBLE PACKAGING RESINS

Marlex® TRB-533 Polyethylene

HIGH DENSITY POLYETHYLENE (HDPE)

This high molecular weight, ethylene-hexene copolymer is tailored for blow molded parts that require:

- Excellent stiffness
- Exceptional ESCR
- Durability

This resin meets these specifications:

- ASTM D4976 - PE 245
- FDA 21 CFR 177.1520(c) 3.2a, use conditions B through H per Table 2 of 21 CFR 176.170(c)

TRB-533 may be suitable for the following continuous extrusion blow molding applications:

- Household and industrial chemical containers
- Food packaging
- UN container applications

Nominal Resin Properties	English	SI	Method
Density	---	0.960 g/cm ³	ASTM D1505
Flow Rate (HLMI, 190 °C/21.6 kg)	---	33 g/10 min	ASTM D1238
Tensile Strength at Yield, 2 in/min, Type IV bar	4,300 psi	30 MPa	ASTM D638
Elongation at Break, 2 in/min, Type IV bar	750 %	750 %	ASTM D638
Flexural Modulus, Tangent – 16:1 span:depth, 0.5 in/min	235,000 psi	1,620 MPa	ASTM D790
ESCR, Condition B (100 % Igepal), F ₅₀	>2,500 h	> 2,500 h	ASTM D1693
ESCR, Condition B (10 % Igepal), F ₅₀	>1,000 h	>1,000 h	ASTM D1693
Vicat Softening Temperature, Loading 1, Rate A	260 °F	127 °C	ASTM D1525
Heat Deflection Temperature, 66 psi, Method A	178 °F	81 °C	ASTM D648
Brittleness Temperature, Type A, Type I specimen	< -103 °F	< -75 °F	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.

