

# TRICOLENE® HDB50100

## HIGH DENSITY POLYETHYLENE RESIN

### Product Description

- HMW hexene copolymer
- Excellent rigidity
- Good melt strength
- Complies with:
  - U.S. FDA 21 CFR 177.1520 (c) 3.2a
  - ASTM D4976 - PE 235
  - UL94HB yellow card per UL file E54700
  - NSF Standard 61 for potable water

### Typical thermoformed applications:

- Pallets
- Automotive dunnage
- Truck bedliners
- Playground equipment

### Typical blow-molded applications:

- 55-gallon shipping containers
- Fuel containers
- Agricultural chemical tanks

Tricolene HDB 50100 High Density Polyethylene resin is a high molecular weight hexene copolymer tailored for large blow molded and thermoformed parts that require good melt strength, good rigidity, high ESCR, excellent low temperature impact strength, and can be recycled.

Physical	Nominal Value (ENG)	Nominal Value (SI)	Test Method
Density	0.948 g/cm <sup>3</sup>	0.948 g/cm <sup>3</sup>	ASTM D1505
Melt Flow Rate	10.0 g/10 min	10.0 g/10 min	ASTM D1238
Mechanical	Nominal Value (ENG)	Nominal Value (SI)	Test Method
Tensile Strength (Yield)	3600 psi	25 MPa	ASTM D638
Elongation (Break)	7	7	ASTM D638
Flexural Modulus*	175,000 psi	1200 MPa	ASTM D790
Environmental Stress Crack Resistance**	> 600 h	> 600 h	ASTM D1693
Durometer Hardness	68	68	ASTM D2240
Tensile Impact	90 ft-lb/in <sup>2</sup>	190 kJ/m <sup>2</sup>	ASTM D1822
Thermal	Nominal Value (ENG)	Nominal Value (SI)	Test Method
Vicat Softening Temperature	258 °F	126 °C	ASTM D1525
Heat Deflection Temperature (66 psi)	173 °F	78 °C	ASTM D648
Brittleness Temperature	< -103 °F	< -75 °C	ASTM D746

\* Tangent - 16:1 span:depth, 0.5 in/min

\*\* 100% Igepal

