

TECHNICAL DATA SHEET

TRICOLENE HDB50100

High Density Polyethylene

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ADDING A WORLD OF VALUE

PRODUCT DESCRIPTION

This type of HDPE is a copolymer of ethylene and 1-hexene

PROCESSING METHODS

(Co)Extrusion Blow Molding
Sheet (Co)Extrusion

CHARACTERISTICS

High ESCR
High Impact Strength

APPLICATIONS

Jerry Cans
Agricultural Chemical Containers
Fuel Containers

RESIN PROPERTIES

Melt Flow Rate 21.60 kgf/190 °C HLMFR
Density 23 °C
Antioxidant Package

ASTM D1238
ASTM D1505

VALUES, ENGLISH UNITS

10.0 g/10 min
0.950 g/cm³
Yes

VALUES, INTERNATIONAL UNITS

10.0 g/10 min
0.950 g/cm³
Yes

MECHANICAL PROPERTIES

Tensile Strength at Yield
2.0 in/min (50.8 mm/min), Type IV compression molded plaque
Tensile Elongation at Break
2.0 in/min (50.8 mm/min), Type IV compression molded plaque
Flexural Modulus
Initial Tangent - 0.051 in/min (1.3 mm/min)
Tensile Impact Strength
Type S bar, 23 °C
Shore Hardness
Type D Durometer

TEST METHOD

ASTM D638
ASTM D638
ASTM D790A
ASTM D1822
ASTM D2240

VALUES, ENGLISH UNITS

3,600 psi
700 %
175,000 psi
90 ft-lbf/in²
68.0

VALUES, INTERNATIONAL UNITS

25 MPa
700 %
1,207 MPa
189 kJ/m²
68.0

OTHER PROPERTIES

Vicat Softening Temperature - VST
10 N (1 kg), 50 °C/h
Heat Deflection Temperature - HDT
66 psi (0.455 MPa), Method A
Environmental Stress Crack Resistance - ESCR
Condition B: 100 % Igepal at 50 °C, F50

TEST METHOD

ASTM D1525
ASTM D648
ASTM D1693

VALUES, ENGLISH UNITS

258 °F
173 °F
600 h

VALUES, INTERNATIONAL UNITS

126 °C
78 °C
600 h

The data presented here is true and accurate to the best of our knowledge. Likewise, the values are nominal and should not be taken as minimum or maximum specifications. No warranty, express or implied, is made regarding resin performance. The customer must validate these properties according to his own evaluations on his machine and in his laboratory.

REGULATORY COMPLIANCE

This resin complies with the following FDA regulation: 21 CFR 177.1520: Olefinic Polymers. This regulation describes polyolefin resins that can be used safely for food packaging and preservation at low temperatures and at ambient temperatures. This resin is not designed for use in medical applications and should not be used in such applications.

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RIGID

