



VALTIS HDB-01

HIGH DENSITY POLYETHYLENE

Technical Data Sheet | FIN-X Polymers

PRODUCT DESCRIPTION

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

GENERAL

Category	Details
Processing Methods	(Co)Extrusion Blow Molding Sheet (Co)Extrusion
Characteristics	High ESCR High Impact Strength
Applications	Jerry Cans Agricultural Chemical Containers Fuel Containers

TECHNICAL PROPERTIES

Section	Property / condition	Test method	English value	SI value
Resin	Melt Flow Rate, HLMFR (21.60 kgf / 190°C)	ASTM D1238	10.0 g/10 min	10.0 g/10 min
Resin	Density (23°C)	ASTM D1505	0.950 g/cm ³	0.950 g/cm ³
Resin	Antioxidant Package	---	Yes	Yes
Mechanical	Tensile Strength at Yield (2.0 in/min [50.8 mm/min], Type IV compression molded plaque)	ASTM D638	3,600 psi	25 MPa
Mechanical	Tensile Elongation at Break (2.0 in/min [50.8 mm/min], Type IV compression molded plaque)	ASTM D638	700%	700%
Mechanical	Flexural Modulus (Initial Tangent - 0.051 in/min [1.3 mm/min])	ASTM D790A	175,000 psi	1,207 MPa
Mechanical	Tensile Impact Strength (Type S bar, 23°C)	ASTM D1822	90 ft-lbf/in ²	189 kJ/m ²
Mechanical	Shore Hardness (Type D Durometer)	ASTM D2240	68.0	68.0
Other	Vicat Softening Temperature - VST (10 N [1 kg], 50°C/h)	ASTM D1525	258°F	126°C
Other	Heat Deflection Temperature - HDT (66 psi [0.455 MPa], Method A)	ASTM D648	173°F	78°C
Other	Environmental Stress Crack Resistance - ESCR (Condition B: 100% Igepal at 50°C, F50)	ASTM D1693	600 h	600 h

DATA NOTICE

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 NOTES

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.

Values are typical and are not to be construed as specifications. Validate performance for the intended application before final material selection.