



VALTIS HDI-02

HIGH DENSITY POLYETHYLENE

Technical Data Sheet | FIN-X Polymers

PRODUCT DESCRIPTION

This type of HDPE is a homopolymer of ethylene with narrow unimodal MWD.

GENERAL

Category	Details
Processing Methods	Injection Molding
Characteristics	Excellent Stiffness UV Resistance Good Processability
Applications	Crates Cases Tote Boxes

TECHNICAL PROPERTIES

Section	Property / condition	Test method	English value	SI value
Resin	Melt Flow Rate, MFR2 (2.16 kgf / 190°C)	ASTM D1238	8.00 g/10 min	8.00 g/10 min
Resin	Density (23°C)	ASTM D1505	0.965 g/cm ³	0.965 g/cm ³
Resin	UV Stabilizer	---	Yes	Yes
Resin	Antioxidant Package	---	Yes	Yes
Mechanical	Tensile Strength at Yield (23°C, 2.0 in/min [50.8 mm/min], Type IV compression molded plaque)	ASTM D638	4,770 psi	33 MPa
Mechanical	Tensile Strength at Break (23°C, 2.0 in/min [50.8 mm/min], Type IV compression molded plaque)	ASTM D638	4,100 psi	28 MPa
Mechanical	Tensile Elongation at Yield (23°C, 2.0 in/min [50.8 mm/min], Type IV compression molded plaque)	ASTM D638	6.1%	6.1%
Mechanical	Tensile Elongation at Break (23°C, 2.0 in/min [50.8 mm/min], Type IV compression molded plaque)	ASTM D638	16.5%	16.5%
Mechanical	Flexural Modulus (Secant at 1% Elongation - 0.051 in/min [1.3 mm/min])	ASTM D790A	256,500 psi	1,769 MPa
Mechanical	Flexural Modulus (Secant at 2% Elongation - 0.051 in/min [1.3 mm/min])	ASTM D790A	214,700 psi	1,481 MPa
Mechanical	Izod Notched Impact Strength (23°C, 1/8 in [3.2 mm])	ASTM D256	0.66 ft-lbf/in	35 J/m
Mechanical	Shore Hardness (D Scale, 15 s)	ASTM D2240	68.0	68.0
Other	Vicat Softening Temperature - VST (10 N [1 kg], 50°C/h)	ASTM D1525	262°F	128°C
Other	Heat Deflection Temperature - HDT (66 psi [0.455 MPa], Method A)	ASTM D648	179°F	82°C

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.