

TECHNICAL DATA SHEET

HDI8965UV

High Density Polyethylene

PRODUCT DESCRIPTION

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

PROCESSING METHODS	CHARACTERISTICS	APPLICATIONS
Injection Molding	Excellent Stiffness UV Resistance Good Procesability	Crates Cases Tote Boxes

RESIN PROPERTIES	TEST METHOD	VALUES, ENGLISH UNITS	VALUES, INTERNATIONAL UNITS
Melt Flow Rate 2.16 kgf/190 °C MFR ₂	ASTM D1238	8.00 g/10 min	8.00 g/10 min
Density 23 °C	ASTM D1505	0.965 g/cm ³	0.965 g/cm ³
UV Estabilizer	---	Yes	Yes
Antioxidant Package	---	Yes	Yes

MECHANICAL PROPERTIES	TEST METHOD	VALUES, ENGLISH UNITS	VALUES, INTERNATIONAL UNITS
Tensile Strenght at Yield 23 °C, 2.0 in/min (50,8 mm/min), Type IV compression molded plaque	ASTM D638	4,770 psi	33 MPa
Tensile Strenght at Break 23 °C, 2.0 in/min (50,8 mm/min), Type IV compression molded plaque	ASTM D638	4,100 psi	28 MPa
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 %
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 %
Flexural Modulus Secant at 1 % of Elongation - 0,051 in/min (1,3 mm/min) Secant at 2 % of Elongation - 0,051 in/min (1,3 mm/min)	ASTM D790A	256,500 psi 214,700 psi	1,769 MPa 1,481 MPa
Izod Notched Impact Strength 23 °C, 1/8 in (3,2 mm)	ASTM D256	0.66 ft-lbf/in	35 J/m
Shore Hardness Escala D, 15 s	ASTM D2240	68.0	68.0

OTHER PROPERTIES	TEST METHOD	VALUES, ENGLISH UNITS	VALUES, INTERNATIONAL UNITS
Vicat Softennig Temperature - VST 10 N (1 kg), 50 °C/h	ASTM D1525	262 °F	128 °C
Heat Deflection Temperature - HDT 66 psi (0,455 MPa), Method A	ASTM D648	179 °F	82 °C

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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