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	Crates
	UV Resistance	Cases
	Good Procesability	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 ºC, 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 ºC, 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 ºC, 2.0 in/min (50,8 mm/min), Type IV compression molded plaque	ASTM D638	**6.1** %	**6.1** %
Tensile Elongation at Break 23 ºC, 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)	ASTM D790A	**256,500** psi	**1,769** MPa
Secant at 2 % of Elongation - 0,051 in/min (1,3 mm/min)		**214,700** psi	**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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