

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)			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.