

VP-HD-5110

Description:

VP-HD-5110 is a high molecular weight, high density polyethylene with broad molecular weight distribution specially developed for producing thin films with excellent strength and rigidity. Films produced with this grade can be readily treated and printed to give high quality graphics. VP-HD-5110 is manufactured using Basell license.

Features	Applications	Packaging
High density, high tear resistance, good melt stability, and high quality graphic printing.	Blown films extrusion, uni/multi wall packagings, high quality thin films, shopping bags, and high strength grocery sacks.	Supplied in the form of pellets, or in bulk, or in 25 Kg bags.

Physical properties	Unit	Typical value	Test method
MFR (190 °C / 21.6 Kg)	g/10min.	10	ISO 1133
Density	g/cm³	0.951	ISO 1183(A)
Thermal properties	Unit	Typical value	Test method
Vicat softening point (A/10N)	°C	127	ISO 306
Melting temperature	°C	132	ISO 3146
Mechanical properties	Unit	Typical value	Test method
Tensile modulus of elasticity	MPa	1050	ISO 527-1,2
Tensile strength (MD)	MPa	55	ISO 527-1,3
Tensile strength (TD)	MPa	55	ISO 527-1,3
Tensile stress at yield	MPa	26	ISO 527-1,3
Strain at break (MD)	%	580	ISO 527-1,3
Strain at break (TD)	%	620	ISO 527-1,3
Strain at yield	%	10	ISO 527-1,3
Elmendorf tear strength (MD)	mN	250	ISO 6383-2
Elmendorf tear strength (TD)	mN	800	ISO 6383-2
Recommended process conditions			
Extruder temperature profile: 200-235 °C		Blow-up ratio: 3-5	
Film thickness: 15-50 µm			