

HD8110MBLS

High Density Polyethylene Black Compound Resin

Special Characteristics : PlastMate HD8110MBLS is a high density polyethylene black pipe compound grade which is certified as a MRS 10.0 (PE100). It is bimodal resins exhibit excellent processability with low sagging property, high thermal stability, good dispersion of carbon black and good chemical resistance properties. The product is suitable for large and thick pressure pipe, produced by conventional pipe extrusion process.

Typical Applications : Large and thick pressure pipes , Drinking water pipes, Industrial pipes and Sewer pipes.

Typical Properties :

Properties	HD8110MBLS	Unit	Test Method
Physical and Mechanical Properties			
Melt Flow Rate (190 °C, 5 kg)	0.21	g/10 min	ISO 1133
Density	0.960	g/cm ³	ISO 1183
Tensile Strength at Yield	24	MPa	ISO 527
Tensile strength at Break	35	MPa	ISO 527
Elongation at Break	750	%	ISO 527
Flexural Modulus	10500	kg/cm ²	ASTM D790
Carbon Black Content	2.25	% wt	ISO 6964
Carbon Black dispersion	< 3	-	ISO 18553
Notched Izod Impact Strength	50 (NB)*	kg.cm/cm	ASTM D256
Durometer Hardness	64	Shore D	ASTM D2240
ESCR , F ₅₀ (Condition B, 25 % Igepal)	>2000	Hours	ASTM D1693
Oxidative Induction Time (OIT, 210 °C)	> 50	Minutes	ISO 11357-6
MRS Classification	10.0 (PE100)	MPa	ISO12162/ ISO 9080
Resistance to crack growth (@ 80 °C)	> 500	Hour	ISO 13479
Rapid crack propagation, Pc, S4	> 10**	Bar	ISO 13477

Recommendation

Preheat condition : 2 hours at 80 °C
 Extruder temperature : 180 - 200 °C
 Die temperature : 190 - 210 °C

* NB = Non Break

** Tested on 110 mm OD pipe

FDA Statement :

Food and Drug Administration US FDA 21 CFR 177.1520 and Commission Regulation (EU) 10/2011. More compliance regulations and standards that related to the product shall be exhibited in Product Regulatory Certificate (PRC) document.

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Note : Properties reported here are typical values of the product, not to be considered as specifications.

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