

# HD8181MB

High Density Polyethylene Black Compound Resin

**Special Characteristics :** PlastMate HD8181MB is a high density polyethylene black pipe compound grade which is produced from bimodal polymerization, Mitsui Technology. It has good mechanical properties and chemical resistance properties. This grade is not certified with MRS classification. It is suitable for non-pressure pipe applications.

**Typical Applications :** Non-pressure pipes such as Conduit pipe, Corrugate pipe and Sewer pipes.

**Typical Properties :**

Properties	HD8181MB	Unit	Test Method
<b>Physical Properties</b>			
Melt Flow Rate (190 °C, 5 kg)	0.30	g/10 min	ISO 1133
Density	0.960	g/cm <sup>3</sup>	ISO 1183
<b>Mechanical Properties (compression specimens)</b>			
Tensile Strength at Yield	22	MPa	ISO 527
Tensile strength at Break	30	MPa	ISO 527
Elongation at Break	>500	%	ISO 527
Flexural Modulus	10,500	kg/cm <sup>2</sup>	ASTM D790
Carbon Black Content	2.25	% wt	ISO 6964
Carbon Black dispersion	< 7	-	ISO 18553
Durometer Hardness	64	Shore D	ASTM D2240
ESCR , F <sub>50</sub> (Condition B, 25 % Igepal)	>2000	Hours	ASTM D1693
Oxidative Induction Time (OIT, 210 °C)	>40	Minutes	ISO 11357-6

\* NB = Non Break

**Recommendation :**

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

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