



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 |
|--|----------|--------------------|------------------|
| Physical Properties | | | |
| Melt Flow Rate (190 °C, 5 kg) | 0.30 | g/10 min | ISO 1133 |
| Density | 0.960 | g/cm ³ | ISO 1183 |
| Melting temperature | 132 | °C) | ASTM3418 |
| Mechanical Properties (compression specimens |) | | |
| Tensile Strength at Yield | 22 | MPa | ISO 527 |
| Tensile strength at Break | 30 | MPa | ISO 527 |
| Elongation at Break | >500 | % | ISO 527 |
| Stiffness | 8,000 | kg/cm ² | ASTM D747 |
| Flexural Modulus | 10,500 | kg/cm ² | 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_{50} (Condition B, 25 % Igepal) | >2000 | Hours | ASTM D1693 |
| Oxidative Induction Time (OIT, 210 °C) | >40 | Minutes | ISO 11357-6 |
| Recommendation: Preheat condition: 2 hours at 80 °C Extruder temperature: 180 - 200 °C Die temperature: 190 - 210 °C | | | * NB = Non Break |

Disclaimer: To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication; however, we do not assume any liability what so ever for the accuracy and completeness of such information. We make no warranties which extend beyond the description contained herein. Nothing herein shall constitute any implied warranty of merchantability or fitness for a particular purpose. It is the customer's responsibility to inspect and test our products in order to satisfy itself as to the suitability of the products for the customer's particular purpose. The customer is responsible for the appropriate, safe and legal use, processing and handling of our products. No liability can be accepted in respect of the use of our products in conjunction with other materials. The information contained herein relates exclusively to our products when not used in conjunction with any third party materials.

Note: Properties reported here are typical values of the product, not to be considered as specifications. GC makes no representations as to the accuracy or completeness of the information contained herein.