

POLYMERS

SABIC[®] HDPE PIPE P6006

PRODUCT DESCRIPTION

P6006 is black compound high density (class MRS 10 - PE 100) Polyethylene with bimodal distribution of molecular mass. It is specifically designed for pressure Pipe applications. It provides excellent stress crack resistance properties (ESCR) combined with very good long term hydrostatic strength.

TYPICAL APPLICATIONS

P6006 Pressure pipes for drinking water, irrigation, gas distribution and waste water pipes. It is also recommended for manufacture of chemical liners and containers.

TYPICAL DATA

| PROPERTIES | Unit | Value ⁽¹⁾ | Test Method |
|-------------------------------------------|-------------------|----------------------|-------------|
| Melt Flow Rate | | | |
| @ 190°C & 5 kg load | g/10 min | 0.23 | ISO 1133 |
| @ 190°C & 21.6 kg load | | 6.2 | |
| Carbon Black content | % | 2.25 | ISO 6964 |
| Density @ 23°C | Kg/m ³ | 959 | ISO 1183 |
| MECHANICAL PROPERTIES(2) | | | |
| Tensile Strength @ Yield ⁽³⁾ | MPa | 23 | ISO 527-2 |
| Tensile Elongation @ Yield ⁽³⁾ | % | 9 | |
| Tensile Modulus ⁽³⁾ | MPa | 900 | |
| Charpy Impact Notched | | | |
| @ 23°C | kJ/m ² | 26 | ISO 179 |
| @ -30°C | | 13 | |
| Hardness (Shore D) | - | 63 | ISO 868 |
| THERMAL PROPERTIES | | | |
| Vicat Softening Point @ 50N (VST/B) | °C | 74 | ISO 306 |
| OIT (210°C) | Min | > 20 | EN 728 |

(1) Typical values: not to be construed as specification limits.

(2) Properties are based on 20 m film produced at 4 BUR using 100% P6006.

(3) Test specimen according to ISO 527-2 type 1 BA, thickness 2mm with 50mm/min test speed.

Processing Conditions:

Typical processing conditions for P6006

Melt temperature: 190-220°C

FOOD REGULATION

P6006 grade is suitable for Food contact application. Detailed information is provided in relevant material safety Datasheet and for additional specific information please contact SABIC local representative for certificate.

STORAGE AND HANDLING

Polyethylene material / compound should be stored in a manner to prevent a direct exposure to sunlight and/or heat. The storage area should also be dry and preferably don't exceed 50°C. SABIC would not give warranty to bad storage conditions lead to quality deterioration and inadequate product performance. It is advisable to process PE resin within 6 months after delivery.

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