

SABIC® HDPE P6006LS

HIGH DENSITY POLYETHYLENE FOR PIPE

DESCRIPTION

P6006LS is black compound multimodal high density (classified as PE112) specifically designed for pressure Pipe low sagging (LS) applications. It delivers exceptional low sag performance for large-diameter pipes and pressure pipes with low standard dimension ratio (SDR).

TYPICAL APPLICATIONS

P6006LS is specially developed for pressure pipes for portable water, gas, sewage and other liquids.

TYPICAL PROPERTY VALUES

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|--|----------------|-------------------|--------------|
| POLYMER PROPERTIES | | | |
| Melt Flow Rate (MFR) ⁽¹⁾ | | | |
| @ 190°C & 5 kg load ⁽¹⁾ | 0.23 | g/10 min | ISO 1133 |
| @ 190°C & 21.6 kg load | 6.4 | g/10 min | ISO 1133 |
| Carbon black content | 2.25 | % | ISO 6964 |
| Density at 23°C | 960 | kg/m ³ | ASTM D1505 |
| MECHANICAL PROPERTIES | | | |
| Tensile Strength at Yield | 23 | MPa | ASTM D638 |
| Tensile Elongation @ Break | >350 | % | ISO 527 |
| Tensile modulus ⁽²⁾ | 850 | MPa | ASTM D638 |
| Tensile creep Modulus @ 1000h | 360 | MPa | ISO 899-1 |
| Charpy Notched Impact Strength @ 23°C ⁽³⁾ | 26 | kJ/m ² | ISO 179 |
| THERMAL PROPERTIES | | | |
| OIT (210°C) | 20 | Minutes | EN 728 |

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

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

(3) Based on compression molded sheet

PROCESSING CONDITIONS

Typical processing conditions for P6006LS Melt temperature: 190-220°C