

# SABIC® HDPE P6006AD

HIGH DENSITY POLYETHYLENE FOR PIPE

## **DESCRIPTION**

P6006AD is black compound multimodal high density polyethylene (classified as PE112 & PE4710) specially designed for pressure pipe applications. It delivers exceptional processing performance.

# **TYPICAL APPLICATIONS**

P6006AD is specially developed for pressure pipes for portable water, gas, sewage and other liquids.

## **TYPICAL PROPERTY VALUES**

**TEST METHODS** PROPERTIES TYPICAL VALUES UNITS POLYMER PROPERTIES Melt Flow Rate (MFR) (1) @ 190°C & 5 kg load <sup>(1)</sup> 0.23 a/10 min ISO 1133 @ 190°C & 21.6 kg load (1) 6.4 g/10 min ISO 1133 Carbon black content (1) 2.25 % ISO 6964 Density at 23°C<sup>(1)</sup> 959 ASTM D1505 kg/m<sup>3</sup> MECHANICAL PROPERTIES Tensile Strength at Yield (2) 23 MPa ASTM D638 Tensile Elongation @ Break (2) ISO 527 >350 % Tensile modulus (2) 900 ASTM D638 MPa Tensile creep Moduls @ 100h (3) 360 ISO 527-2 MPa Charpy Notched Impact Strength @ 23°C (3) ISO 179 26 kJ/m² THERMAL PROPERTIES OIT (210°C) >30 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 P6006AD Melt temperature: 190-220°C. It is recommended to dry the material prior to processing.

### 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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