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

Revision 20260826

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 (1)	6.4	g/10 min	ISO 1133
Carbon black content (1)	2.25	%	ISO 6964
Density at 23°C (1)	959	kg/m³	ASTM D1505
MECHANICAL PROPERTIES			
Tensile Strength at Yield (2)	23	MPa	ASTM D638
Tensile Elongation @ Break (2)	>350	%	ISO 527
Tensile modulus (2)	900	MPa	ASTM D638
Tensile creep Moduls @ 100h (3)	360	MPa	ISO 527-2
Charpy Notched Impact Strength @ 23°C (3)	26	kJ/m²	ISO 179
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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