

# **POLYMERS**

# SABIC® HDPE PIPE P6006N

#### PRODUCT DESCRIPTION

P6006N is a grade which has a high density (class MRS 10) and a bimodal distribution of the molecular mass. An universal grade for pipe extrusion which, due to a keen combination of properties. It can be used for telecommunication, corrugated and spiral pipes.

# **TYPICAL APPLICATIONS**

P6006N is a natural High Density Polyethylene (HDPE) resin specifically designed for Pipe Extrusion. It provides excellent stress crack resistance properties (ESCR) combined with very good long term hydrostatic strength.

#### **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	
Density @ 23°C	Kg/m³	949	ISO 1183
MECHANICAL PROPERTIES (2)			
Tensile Strength @ Yield <sup>(3)</sup>	MPa	23	ISO 527-2
Tensile Elongation @ Yield <sup>(3)</sup>	%	10	
Tensile Modulus <sup>(3)</sup>	MPa	850	
Charpy Impact Notched at 23°C	kJ/m <sup>2</sup>	25	ISO 179
Flexural creep modulus	MPa	1050	DIN 19537-2
(4 point, 1 min-value)			
Hardness (Shore D)	-	64	ISO 868
THERMAL PROPERTIES			
Vicat Softening Temperature	°C	74	ISO 306
Brittleness Temperature	°C	<-80	ASTM D746-72
OIT (210 C)	Min	> 20	EN 728

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

(2) Based on Compression molded sheet.

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

Processing Conditions:

Typical processing conditions for P6006N

Melt temperature: 190-220°C

#### HEALTH, SAFETY AND FOOD CONTACT REGULATIONS

Detailed information is provided in the relevant Material Safety Datasheet and or Standard Food Declaration, Additional specific information can be requested via your local Sales Office.

# 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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