

POLYMERS

SABIC[®] HDPE PIPE P5510N

PRODUCT DESCRIPTION

P5510N is a grade which has a high density (class MRS 8) and a bimodal distribution of the molecular mass. An universal grade for pipe extrusion which, due to a keen combination of properties.

TYPICAL APPLICATIONS

P5510N 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 and better flexibility.

TYPICAL DATA

PROPERTIES	Unit	Value ⁽¹⁾	Test Method
Melt Flow Rate			
@ 190°C & 5 kg load	g/10 min	0.43	ISO 1133
@ 190°C & 21.6 kg load		10.3	
Density @ 23°C	Kg/m ³	944	ISO 1183
MECHANICAL PROPERTIES ⁽²⁾			
Tensile Strength @ Yield ⁽³⁾	MPa	22	ISO 527
Tensile Elongation @ Yield ⁽³⁾	%	10	
Tensile Modulus ⁽³⁾	MPa	850	
Charpy Impact Notched at 23°C	kJ/m ²	23	ISO 179
Flexural creep modulus (4 point, 1 min-value)	MPa	1000	DIN 19537-2
Hardness (Shore D)	-	61	ISO 868
THERMAL PROPERTIES			
Vicat Softening Temperature	°C	67	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 P5510N

Melt temperature: 190-220°C