

SABIC® HDPE P4808NA

HIGH DENSITY POLYETHYLENE FOR PIPE

DESCRIPTION

P4808NA is a high density Polyethylene with multimodal distribution of the molecular mass. This is natural color grade suitable for non-pressure pipe applications.

It provides good ESCR (environmental stress cracking resistance)

TYPICAL APPLICATIONS

P4808NA is a natural High Density Polyethylene (HDPE) resin specifically designed for non-pressure pipes such as Irrigation, cable conduits and Gravity pipes segment.

TYPICAL PROPERTY VALUES

Revision 20210103

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	6.5	g/10 min	ISO 1133
Density at 23°C	949	kg/m ³	ASTM D1505
MECHANICAL PROPERTIES			
Hardness (Shore D) ⁽²⁾	>52	-	ASTM D2240
Tensile Strength at Yield ⁽³⁾	22	MPa	ASTM D638
Tensile Elongation at Yield	8	%	ISO 527-1/-2
Tensile modulus	850	MPa	ASTM D638
Charpy Impact Notched @ 23°C	23	kJ/m ²	ISO 179
Flexural Modulus	820	MPa	ISO 178/1A
Flexural Strength	25	MPa	ISO 178
THERMAL PROPERTIES			
Vicat Softening Point @ 50N (VST/B)	74	°C	ISO 306
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 P4808NA : Melt temperature: 190-220°C

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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