

# 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 20220721

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>POLYMER PROPERTIES</b>			
<b>Melt Flow Rate (MFR) <sup>(1)</sup></b>			
@ 190°C & 5 kg load <sup>(1)</sup>	0.23	g/10 min	ISO 1133
@ 190°C & 21.6 kg load	6.5	g/10 min	ISO 1133
<b>Density at 23°C</b>	949	kg/m <sup>3</sup>	ASTM D1505
<b>MECHANICAL PROPERTIES</b>			
<b>Hardness (Shore D) <sup>(2)</sup></b>	>52	-	ASTM D2240
<b>Tensile Strength at Yield <sup>(3)</sup></b>	22	MPa	ASTM D638
<b>Tensile Elongation at Yield</b>	8	%	ISO 527-1/-2
<b>Tensile modulus</b>	850	MPa	ASTM D638
<b>Charpy Impact Notched @ 23°C</b>	23	kJ/m <sup>2</sup>	ISO 179
<b>Flexural Modulus</b>	820	MPa	ISO 178/1A
<b>Flexural Strength</b>	25	MPa	ISO 178
<b>THERMAL PROPERTIES</b>			
<b>Vicat Softening Point @ 50N (VST/B)</b>	74	°C	ISO 306
<b>OIT (210°C)</b>	>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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