SABIC® HDPE P4808N

HIGH DENSITY POLYETHYLENE FOR PIPES

DESCRIPTION

P4808 is a natural multimodal high density polyethylene (HDPE) resin, specifically designed for non-pressure pipe extrusion application. It provides good stress crack resistance properties (ESCR).

TYPICAL APPLICATIONS

Non-Pressure pipe applications such as irrigation, cable conduits, corrugated & gravity pipe segments.

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/m³	ASTM D1505
MECHANICAL PROPERTIES			
Tensile Strength at Yield (2)	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/m²	ISO 179
Hardness (Shore D) (3)	>52	-	ASTM D2240
Flexural Modulus	827	MPa	ISO 178/1A
Flexural Strength	26	MPa	ISO 178
THERMAL PROPERTIES			
Vicat Softening Point	74	°C	ASTM D1525
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 type1 BA, thickness 2 mm with 50mm/min test speed
(3) Based on Compression molded sheet

PROCESSING CONDITIONS

Typical processing conditions for P4808 are: Melt temperature: 190 - 220°C

FOOD REGULATION

P4808N is suitable for Food contact application. Detailed information is provided in relevant Material Safety Datasheet and for additional specific information please contact SABIC local representative for certificate.

STORAGE AND HANDLING

Polyethylene material 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 which may lead to quality deterioration such as color change, bad smell and inadequate product performance. It is advisable to process PE resin within 6 months after delivery.

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