

HDPE P4808N

High Density Polyethylene (HDPE) for Non-Pressure Pipes

DESCRIPTION

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

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER / PHYSICAL PROPERTIES			
Melt Flow Rate (1) @ 190°C & 5 kg load (1)	0.23	g/10 min	ISO 1133
Melt Flow Rate (1) @ 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			
Tensile Strength at Yield (1)	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
Hardness (Shore D) (3)	>52	-	ASTM D2240
Flexural Modulus	820	MPa	ISO 178/1A
Flexural Strength	25	MPa	ISO 178
THERMAL / OTHER PROPERTIES			
Vicat Softening Point	74	°C	ISO 306
OIT (210°C)	>20	Minutes	EN 728

APPLICATIONS

- Non-pressure pipe applications
- Irrigation
- Cable conduits
- Corrugated & gravity pipe segments

PROCESSING / HANDLING

Typical processing conditions (P4808):
Melt temperature: 190 - 220°C
Storage: Prevent direct exposure to sunlight/heat; store dry, preferably below 50°C. Inventory should be consumed within 6 months after delivery.

NOTES / DISCLAIMER

(1) Typical values; not specification limits. (2) Test specimen according to ISO 527-2 type 1BA, 2 mm thickness, 50 mm/min test speed. (3) Based on compression molded sheet. FOOD REGULATION: P4808N is suitable for food contact application; details are in the relevant Material Safety Datasheet and certificates are available from the local SABIC representative. Source SABIC disclaimer: information is provided in good faith without express/implied warranty; the customer is responsible for determining suitability and safe use.