

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

TEST METHODS PROPERTIES TYPICAL VALUES UNITS 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) ASTM D638 22 MPa 8 Tensile Elongation at Yield % 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 °C ASTM D1525 74 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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