

SABIC® LLDPE P118

LINEAR LOW DENSITY POLYETHYLENE FOR PIPES

DESCRIPTION

P118 is a natural liner low density polyethylene (LLDPE) resin, designed for non-pressure pipe extrusion application.

TYPICAL APPLICATIONS

The grade is designed to be used as blend with HDPE for Non-Pressure pipe applications such as irrigation, cable conduits, corrugated & gravity pipe segments.

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES ⁽¹⁾			
Melt Flow Rate (MFR)			
@ 190°C & 2.16kg load	1	g/10 min	ASTM D1238
@ 190°C & 5 kg load	3.3	g/10 min	ASTM D1238
Density			
Density at 23°C	918	kg/m ³	ASTM D792
MECHANICAL PROPERTIES ⁽¹⁾			
Tensile strength			
Tensile @ Yield ⁽²⁾	10.9	MPa	ASTM D638
Tensile @ Break	15.4	MPa	ASTM D638
Elongation @ Yield	17.2	%	ASTM D638
Elongation @ Break	574	%	ASTM D638
Tensile Modulus	345	MPa	ASTM D638
Flexural Modulus	173.4	MPa	ASTM D790
Hardness			
Hardness (shore D) ⁽³⁾	42.4	-	ASTM D2240
THERMAL PROPERTIES			
Vicat Softening Temperature			
Vicat	102.5	°C	ASTM D1525

(1) Typical values; not to be construed as specification limits

(2) Test specimen, thickness 3.2 mm with 50mm/min test speed

(3) Based on injection molded sheet