

SABIC® LLDPE P218

LINEAR LOW DENSITY POLYETHYLENE FOR PIPES

DESCRIPTION

P218 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	2	g/10 min	ASTM D1238
@ 190°C & 5 kg load	5.4	g/10 min	ASTM D1238
Density			
Density at 23°C	918	kg/m³	ASTM D792
MECHANICAL PROPERTIES (1)			
Tensile strength			
Tensile @ Yield ⁽²⁾	11	MPa	ASTM D638
Tensile @ Break	14.3	MPa	ASTM D638
Elongation @ Yield	16.7	%	ASTM D638
Elongation @ Break	492	%	ASTM D638
Tensile Modulus	383.6	MPa	ASTM D638
Flexural Modulus	186.2	MPa	ASTM D790
Hardness			
Hardness (shore D) (3)	42.9	-	ASTM D2240
THERMAL PROPERTIES			
Vicat Softening Temperature			
Vicat	100	°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