



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/m ³ | 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