



SABIC[®] LLDPE 318B

LINEAR LOW DENSITY POLYETHYLENE

DESCRIPTION

SABIC[®] LLDPE318B is a standard C4-LLDPE grade with a relatively low melt flow rate. SABIC[®] LLDPE318B is a general grade, typically used for low filled or additive masterbatches in film and blow moulding applications(e.g. slip agents, anti fog agents, anti static agents, thermal stabilizers). This product is not intended for and must not be used in any pharmaceutical/medical applications.

TYPICAL PROPERTY VALUES

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|--|----------------|-------------------|---------------|
| POLYMER PROPERTIES | | | |
| Melt Flow Rate | | | |
| at 190 °C and 2.16 kg | 2.8 | dg/min | ASTM D1238 |
| Density | 918 | kg/m ³ | ASTM D1505 |
| DSC | | | |
| melting point | 121 | °C | SABIC method |
| MECHANICAL PROPERTIES | | | |
| Tensile test | | | |
| strain at yield | 16 | % | ASTM D638 |
| stress at yield | 12 | MPa | ASTM D638 |
| stress at break | 13 | MPa | ASTM D638 |
| strain at break | 710 | % | ASTM D638 |
| Flexural test | | | |
| Secant modulus at 1% elongation | 251 | MPa | ASTM D790 |
| Hardness Shore D | 48 | - | ISO 868 |
| OPTICAL PROPERTIES | | | |
| Gloss (45°) | 91 | % | ASTM D2457 |
| Haze | 2.1 | % | ASTM D1003 |
| FILM PROPERTIES | | | |
| Dart impact | 2.6 | kJ/m | ISO 7765-2 |
| Tear strength TD | 140 | kN/m | ISO 6383-2 |
| Protrusion Puncture resistance | 2.0 | J | ASTM D5748-95 |
| Elastic recovery & Stress retention | | | |
| Elastic recovery | 51.9 | % | ASTM D5459-95 |
| Stress retention | 78.1 | % | ASTM D5459-95 |
| THERMAL PROPERTIES | | | |
| Vicat Softening Temperature | | | |
| at 10 N (VST/A) | 102 | °C | ISO 306 |
| DSC test | | | |
| enthalpy change | 114 | J/g | SABIC method |
| melting point | 121 | °C | SABIC method |
| ELECTRICAL PROPERTIES | | | |
| Volume resistivity | 8.5E15 | Ohm.cm | ASTM D257 |
| Dissipation factor at 60 Hz | 5.0E-4 | - | ASTM D150 |



| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|-----------------------------------|----------------|------------|--------------|
| Dielectric constant at 60 Hz | 2.2 | - | ASTM D150 |
| Dielectric strength at 2000 V/sec | >30 | V/ μ m | ASTM D149 |