

# SABIC® LLDPE 218B

LINEAR LOW DENSITY POLYETHYLENE

## DESCRIPTION

218B

## TYPICAL PROPERTY VALUES

Revision 20201214

| PROPERTIES                                     | TYPICAL VALUES | UNITS  | TEST METHODS  |
|------------------------------------------------|----------------|--------|---------------|
| <b>POLYMER PROPERTIES</b>                      |                |        |               |
| <b>Melt Flow Rate (MFR)</b>                    |                |        |               |
| at 190 °C and 2.16 kg                          | 2.0            | dg/min | ISO 1133      |
| <b>Density</b>                                 | 918            | kg/m³  | ASTM D1505    |
| <b>DSC</b>                                     |                |        |               |
| melting point                                  | 120            | °C     | SABIC method  |
| <b>MECHANICAL PROPERTIES</b>                   |                |        |               |
| <b>Tensile test</b>                            |                |        |               |
| stress at yield                                | 12             | MPa    | ASTM D638     |
| strain at break                                | 790            | %      | ASTM D638     |
| stress at break                                | 17             | MPa    | ASTM D638     |
| strain at yield                                | 16             | %      | ASTM D638     |
| <b>Flexural test</b>                           |                |        |               |
| Secant modulus at 1% elongation                | 254            | MPa    | ASTM D790     |
| <b>Hardness Shore D</b>                        | 48             | -      | ISO 868       |
| <b>OPTICAL PROPERTIES</b>                      |                |        |               |
| <b>Gloss (45°)</b>                             | 92             | %      | ASTM D2457    |
| <b>Haze</b>                                    | 1.2            | %      | ASTM D1003    |
| <b>FILM PROPERTIES</b>                         |                |        |               |
| <b>Dart impact</b>                             | 2.8            | kJ/m   | ISO 7765-2    |
| <b>Tear strength TD</b>                        | 185            | kN/m   | ISO 6383-2    |
| <b>Protrusion Puncture resistance</b>          | 2.2            | J      | ASTM D5748-95 |
| <b>Elastic recovery &amp; Stress retention</b> |                |        |               |
| Stress retention                               | 79.9           | %      | ASTM D5459-95 |
| Elastic recovery                               | 52.6           | %      | ASTM D5459-95 |
| <b>Peel cling</b>                              |                |        |               |
| 0% pre-stretch                                 | 0.06           | N/mm   | ASTM D5458-95 |
| 200% pre-stretch                               | 0.05           | N/mm   | ASTM D5458-95 |
| <b>THERMAL PROPERTIES</b>                      |                |        |               |
| <b>Vicat Softening Temperature</b>             |                |        |               |
| at 10 N (VST/A)                                | 96             | °C     | ISO 306       |
| <b>DSC test</b>                                |                |        |               |
| melting point                                  | 122            | °C     | SABIC method  |
| <b>HIGHLIGHT PROPERTIES</b>                    |                |        |               |
| <b>Ultimate pre-stretch level</b>              | 310            | %      | -             |
| <b>Retention force at 60 sec</b>               | 0.97           | kg     | -             |

| PROPERTIES                       | TYPICAL VALUES | UNITS | TEST METHODS |
|----------------------------------|----------------|-------|--------------|
| <b>ELECTRICAL PROPERTIES</b>     |                |       |              |
| Volume resistivity               | 5.0E15         | Ω.cm  | ASTM D257    |
| Dissipation factor at 60 Hz      | 1.0E-3         | -     | ASTM D150    |
| Dielectric constant at 60 Hz     | 2.17           | -     | ASTM D150    |
| Dielectric strength at 500 V/sec | 55             | V/μm  | ASTM D149    |

## DISCLAIMER

Any sale by SABIC, its subsidiaries and affiliates (each a "seller"), is made exclusively under seller's standard conditions of sale (available upon request) unless agreed otherwise in writing and signed on behalf of the seller. While the information contained herein is given in good faith, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND NONINFRINGEMENT OF INTELLECTUAL PROPERTY, NOR ASSUMES ANY LIABILITY, DIRECT OR INDIRECT, WITH RESPECT TO THE PERFORMANCE, SUITABILITY OR FITNESS FOR INTENDED USE OR PURPOSE OF THESE PRODUCTS IN ANY APPLICATION. Each customer must determine the suitability of seller materials for the customer's particular use through appropriate testing and analysis. No statement by seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right.