



# SABIC® PP RELY 61EK61PS

## PP IMPACT COPOLYMER

### DESCRIPTION

This impact copolymer has a high molecular weight and is provided with a long-term heat stabilisation package. It exhibits extra high stiffness in combination with outstanding impact strength even at low temperatures. This material is used for extrusion of non-pressure sewage pipe applications and can also be used for sheet extrusion.

### TYPICAL PROPERTY VALUES

| PROPERTIES                            | TYPICAL VALUES | UNITS             | TEST METHODS |
|---------------------------------------|----------------|-------------------|--------------|
| <b>POLYMER PROPERTIES</b>             |                |                   |              |
| <b>Melt Flow Rate</b>                 |                |                   |              |
| at 230 °C and 2.16 kg                 | 0.30           | dg/min            | ISO 1133     |
| <b>Density</b>                        | 905            | kg/m <sup>3</sup> | ASTM D1505   |
| <b>FORMULATION</b>                    |                |                   |              |
| <b>Anti static agent</b>              | □              | -                 | -            |
| <b>MECHANICAL PROPERTIES</b>          |                |                   |              |
| <b>Tensile test</b>                   |                |                   |              |
| tensile modulus <sup>(1)</sup>        | 1850           | MPa               | ISO 527-2 1A |
| strain at yield <sup>(2)</sup>        | 8              | %                 | ISO 527-2 1A |
| stress at yield                       | 40             | MPa               | ISO 527-2 1A |
| <b>Izod impact notched</b>            |                |                   |              |
| at 0 °C                               | 20             | kJ/m <sup>2</sup> | ISO 180/1A   |
| at -20 °C                             | 5              | kJ/m <sup>2</sup> | ISO 180/1A   |
| <b>Izod impact notched</b>            |                |                   |              |
| at 23 °C                              | No Break       | kJ/m <sup>2</sup> | ISO 180/1A   |
| <b>Charpy Impact Strength Notched</b> |                |                   |              |
| at 0 °C                               | 10             | kJ/m <sup>2</sup> | ISO 179/1eA  |
| at -20 °C                             | 6              | kJ/m <sup>2</sup> | ISO 179/1eA  |
| <b>Charpy Impact Strength Notched</b> |                |                   |              |
| at 23 °C                              | No Break       | kJ/m <sup>2</sup> | ISO 179/1eA  |
| <b>Charpy impact unnotched</b>        |                |                   |              |
| at 23 °C                              | No Break       | kJ/m <sup>2</sup> | ISO 179/1eU  |
| <b>Hardness Shore D</b>               | 70             | -                 | ISO 868      |



| PROPERTIES                                 | TYPICAL VALUES | UNITS | TEST METHODS |
|--------------------------------------------|----------------|-------|--------------|
| THERMAL PROPERTIES                         |                |       |              |
| Vicat Softening Temperature <sup>(3)</sup> |                |       |              |
| at 50 N (VST/B)                            | 80             | °C    | ISO 306      |
| at 10 N (VST/A)                            | 155            | °C    | ISO 306      |
| OIT 200°C                                  | > 100          | min   | EN 728       |

- (1) Speed of testing: 1 mm/min  
(2) Speed of testing: 50 mm/min  
(3) Temperature rate: 120°C/h