

# SABIC<sup>®</sup> STAMAX<sup>™</sup> 40YM241

PP LGF REINFORCED  
REGION EUROPE

## DESCRIPTION

SABIC<sup>®</sup> STAMAX 40YM241 is a high heat resistant 40% long glass fiber reinforced grade. The glass fibers are chemically coupled to the PP matrix, resulting in high stiffness and strength.

IMDS ID: 459463868

## TYPICAL PROPERTY VALUES

| PROPERTIES                                  | TYPICAL VALUES | UNITS             | TEST METHODS |
|---------------------------------------------|----------------|-------------------|--------------|
| <b>POLYMER PROPERTIES</b>                   |                |                   |              |
| Density                                     | 1220           | kg/m <sup>3</sup> | ISO 1183     |
| Glass fibre content                         | 40             | %                 | ISO 3451     |
| <b>MECHANICAL PROPERTIES <sup>(1)</sup></b> |                |                   |              |
| <b>Tensile modulus</b>                      |                |                   |              |
| at 23 °C                                    | 8200           | MPa               | ISO 527/1A   |
| at 80 °C                                    | 5400           | MPa               | ISO 527/1A   |
| <b>Tensile strength</b>                     |                |                   |              |
| at 23 °C                                    | 110            | MPa               | ISO 527/1A   |
| at 80 °C                                    | 65             | MPa               | ISO 527/1A   |
| <b>Tensile elongation at break</b>          |                |                   |              |
| at 23 °C                                    | 2.1            | %                 | ISO 527/1A   |
| <b>Flexural Modulus</b>                     |                |                   |              |
| at 23 °C                                    | 8700           | MPa               | ISO 178      |
| at 80 °C                                    | 6100           | MPa               | ISO 178      |
| <b>Flexural strength</b>                    |                |                   |              |
| at 23 °C                                    | 180            | MPa               | ISO 178      |
| at 80 °C                                    | 105            | MPa               | ISO 178      |
| <b>Charpy Impact Strength Notched</b>       |                |                   |              |
| at 23 °C                                    | 26             | kJ/m <sup>2</sup> | ISO 179/1eA  |
| at -30 °C                                   | 25             | kJ/m <sup>2</sup> | ISO 179/1eA  |
| <b>Charpy impact unnotched</b>              |                |                   |              |
| at 23 °C                                    | 55             | kJ/m <sup>2</sup> | ISO 179/1eU  |
| at -30 °C                                   | 50             | kJ/m <sup>2</sup> | ISO 179/1eU  |
| <b>THERMAL PROPERTIES</b>                   |                |                   |              |
| <b>Heat deflection temperature</b>          |                |                   |              |
| at 1.80 MPa (HDT/A)                         | 158            | °C                | ISO 75/A     |
| <b>Coeff. of linear thermal expansion</b>   |                |                   |              |
| -30 °C to 100 °C                            | 40             | µm/mK             | ISO 11359-2  |

(1) All measurements on injection molded samples.