

STAMAX™ 40YM440E

FR PP LGF REINFORCED

DESCRIPTION

SABIC® STAMAX 40YM440E is a 40% long glass fiber reinforced, low emission grade polypropylene. This grade is specially developed for aesthetical visible structural applications. The glass fibers are chemically coupled to the PP matrix, resulting in high stiffness and strength.

STAMAX™ 40YM440E should be dried at 100C for 2 hours before the injection molding.

IMDS ID: 1178431867

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Density	1220	kg/m³	ISO 1183
Glass fibre content	40	%	ISO 3451
MECHANICAL PROPERTIES ⁽¹⁾			
Tensile modulus			
at 23 °C	8200	MPa	ISO 527/1A
at 80 °C	5400	MPa	ISO 527/1A
Tensile strength			
at 23 °C	110	MPa	ISO 527/1A
at 80 °C	64	MPa	ISO 527/1A
Tensile elongation at break			
at 23 °C	2.1	%	ISO 527/1A
Flexural Modulus			
at 23 °C	8700	MPa	ISO 178
at 80 °C	6100	MPa	ISO 178
Flexural strength			
at 23 °C	180	MPa	ISO 178
at 80 °C	105	MPa	ISO 178
Charpy Impact Strength Notched			
at 23 °C	26	kJ/m²	ISO 179/1eA
at -30 °C	25	kJ/m²	ISO 179/1eA
Charpy impact unnotched			
at 23 °C	55	kJ/m²	ISO 179/1eU
at -30 °C	50	kJ/m²	ISO 179/1eU
THERMAL PROPERTIES			
Heat deflection temperature			
at 1.80 MPa (HDT/A)	158	°C	ISO 75/A
Coeff. of linear thermal expansion			
-30 °C to 100 °C	40	µm/mK	ISO 11359-2

(1) All measurements on injection molded samples.

