



STAMAX™ 20YH510

FR PP LGF REINFORCED

DESCRIPTION

STAMAX™ 20YH510 is a high flow, halogen free flame retardant, copolymer reinforced with 20% long glass fiber, developed for Injection molded applications. This material has been designed to combine a good performance profile with good processing.

STAMAX™ 20YH510 should be dried at 100C for 2 hours before the injection molding. Melt temperature of 240 °C should not be exceeded during processing.

IMDS ID:1181781542

TYPICAL PROPERTY VALUES

Revision 20241204

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Density	1225	kg/m ³	ISO 1183
Glass fibre content	20	%	ISO 3451
MECHANICAL PROPERTIES ⁽¹⁾			
Tensile modulus			
at 23 °C	6000	MPa	ISO 527 / 1A
at 80 °C	2900	MPa	ISO 527 / 1A
Tensile strength			
at 23 °C	70	MPa	ISO 527 / 1A
at 80 °C	37	MPa	ISO 527 / 1A
Tensile elongation at break			
at 23 °C	2.1	%	ISO 527 / 1A
Flexural Modulus			
at 23 °C	6200	MPa	ISO 178
at 80 °C	4000	MPa	ISO 178
Flexural strength			
at 23 °C	120	MPa	ISO 178
at 80 °C	60	MPa	ISO 178
Charpy Impact Strength Notched			
at 23 °C	14	kJ/m ²	ISO 179 / 1eA
at -30 °C	14	kJ/m ²	ISO 179 / 1eA
Charpy impact unnotched			
at 23 °C	36	kJ/m ²	ISO 179 / 1eU
at -30 °C	35	kJ/m ²	ISO 179 / 1eU
THERMAL PROPERTIES			
Heat deflection temperature			
at 1.80 MPa (HDT/A)	152	°C	ISO 75/A
Coeff. of linear thermal expansion			
-30 °C to 100 °C	=54	µm/mK	ISO 11359-2
FLAMMABILITY PROPERTIES			
Comparative Tracking Index	600	V	IEC 60112
UL94			



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Lowest thickness for VO	0.8	mm	UL 94
GWFI			
at 0.8mm	=960	°C	IEC 60695-2-12
at 1.6mm	960	°C	IEC 60695-2-12
GWIT			
at 0.8mm	850	°C	IEC 60695-2-13

(1) All measurements on injection molded samples.

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 NON-INFRINGEMENT 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.

