

STAMAX[™] 30YH515

FR PP LGF REINFORCED

DESCRIPTION

STAMAXTM 30YH515 is a high flow, halogen free flame redardant, copolymer reinforced with 30% long glass fiber, specially developed for electrical & electronic injection molded applications. This material has been designed to combine a good performance profile with good processing.

SABIC STAMAX™ 30YH515 is a designated injection molded grade for electrical applications. STAMAX™ 30YH515 should be dried at 100°C for 2 hours before the injection molding.

UL Yellow Card: E111275

TYPICAL PROPERTY VALUES

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Glass fibre content90%803451MECHANICAL PROPERTIS ⁽¹⁾ Tensite modulusTensite modulusTensite modulusTensite modulusTensite forgation at breakTensite forgation at breakTensite modulusTensite Modulus </td <td>POLYMER PROPERTIES</td> <td></td> <td></td> <td></td>	POLYMER PROPERTIES			
MECHANICAL PROPERTIS ⁽¹⁾ Tensile modulusat 20 °C7600MPa50 527/1Aat 80 °C800MPa50 527/1AAdot on the set of t	Density	1270	kg/m ³	ISO 1183
Fasile modulasat.83 °C7600MPa80527/1Aat.83 °C6400MPa80527/1Afat.34 °C800MPa80527/1Afat.35 °C8050527/1A50fat.34 °C8080527/1A50fat.35 °C808080178at.84 °C900MPa80178at.85 °C60MPa80178fat.36 °C80MPa80178at.84 °C60MPa80178at.85 °C80MPa80178at.84 °C80MPa80178at.36 °C80MPa80178at.36 °C81MPa8017914Aat.36 °C81MPa8017914Aat.37 °C81MPa8017914Aat.36 °C81MPa8017914Aat.37 °C81MPa8017914Aat.36 °C81MPa8017914Aat.37 °C81MPa <td>Glass fibre content</td> <td>30</td> <td>%</td> <td>ISO 3451</td>	Glass fibre content	30	%	ISO 3451
at 23 °CF00MPaSD 5271Aat 80 °C4600MPaSD 5271ATesile elongation at breakSD 5271Aat 32 °C50 5271ASD 5271Aflexural ModulusSD 5271Aat 23 °C600MPaSD 5271Aat 80 °C600MPaSD 178at 80 °C600MPaSD 178at 80 °C600MPaSD 178at 80 °C130MPaSD 178at 80 °C130MPaSD 1791Aat 80 °C130MPaSD 1791Aat 80 °C130MPaSD 1791Aat 30 °C130M/m2SD 1791Aat 30 °C130M/m2SD 1791Aat 30 °C130M/m2SD 1791Aat 30 °C150M/m2SD 1791Aat 30 °C55SU MSD 1791Aat 30 °C55MSD 1791Aat 30 °C55MSD 1791Aat 1.80 Ma (HDT/A)50SD 1791Aat 1.80 Ma (HDT/A)SD 1791ASD 1791Aat 1.80 Ma (HDT	MECHANICAL PROPERTIES (1)			
at 80°C4600MPa50 527 JATensile elongation at break55555at 23°C2.5%5555Flexural Modulus7000MPa50 17855at 80°C4000MPa50 178557at 80°C60MPa50 1785777at 23°C10MPa50 1787777at 23°C10MPa50 178777 <th< td=""><td>Tensile modulus</td><td></td><td></td><td></td></th<>	Tensile modulus			
Tensile elongation at break at 23 °C % IS0 527 / IA Flexural Modulus - - at 23 °C 700 MPa IS0 178 at 80 °C 4600 MPa IS0 178 at 80 °C MPa IS0 178 at 30 °C MPa IS0 179 / IAA at 30 °C IS0 MPa IS0 179 / IAA at 30 °C IS0 179 / IAA IS0 179 / IAA at 30 °C IS0 179 / IAA IS0 179 / IAA at 30 °C IS0 179 / IAA IS0 179 / IAA at 30 °C IS0 IS0 / IS0	at 23 °C	7600	MPa	ISO 527/1A
at 23 °C5555555Hexural Modulus7000MPa150 178at 23 °C4600MPa150 178at 80 °CMPa150 178Hexural strength60MPa150 178at 30 °C60MPa150 178At 23 °C15MPa150 179 14Aat 30 °C13M/m2150 179 14Aat 30 °C13M/m2150 179 14Aat 30 °C44MPa150 179 14Aat 30 °C45M/m2150 179 14Aat 30 °C15MPa150 179 14Uat 30 °C50 179 14U150 179 14Uat 30 °C50 179 14U150 179 14Uat 30 °C15MPa150 179 14Uat 30 °C15°C150 179 14Uat 1.80 MPa (HDT/A)15°C150 179 14Uat 1.80 MPa (HDT/A)15°C150 179 14Uat 1.80 MPa (HDT/A)15°C150 179 14Uat 1.80 MPa (HDT/A)15VVat 1.80 MPa (HDT/A)15VVat 1.80 MPa (HDT/A)15MmUat 1.80 MPa (HDT/A)15MmU	at 80 °C	4600	MPa	ISO 527/1A
Flexural Modulusat 23 °C700MPa150 178at 80 °C4600MPa150 178Flexural strength130MPa50 178at 23 °C60MPa50 178at 30 °C5050 178100Chary Impact Strength Notched13MPa50 179/16Aat 23 °C15Kl/m²50 179/16Aat 23 °C13Kl/m²50 179/16Aat 23 °C13Kl/m²50 179/16Aat 23 °C45Kl/m²50 179/16Aat 23 °C45Kl/m²50 179/16Uat 23 °C45Kl/m²50 179/16Uat 23 °C55Kl/m²50 179/16Uat 23 °C15m/m²50 179/16Uat 23 °C15m/m²50 179/16Uat 30 °C55m/m²50 179/16Ubat deflection temperaturem/m²50 179/16Ucto 100 °C50m/m²50 13592cto 100 °C60VEc60112ctored for	Tensile elongation at break			
at 23 °C700MPa50 178at 80 °CA600MPa50 178facural strength130MPa150 178at 23 °C60MPa50 178at 23 °C15Kl/m²50 179 14Aat 30 °CKl/m²50 179 14A60 179 14Aat 30 °C13Kl/m²50 179 14Aat 30 °CKl/m²50 179 14Bat 30 °CKl/m²50 179 14BHERKL PROPERTIESVVHERKL ROPERTIESVS0 179 14Bcong cong cong cong cong cong cong cong	at 23 °C	2.5	%	ISO 527/1A
at 80 °CMPaSD 178Flexural strengthI30MPaSD 178at 23 °C60MPaSD 178Charpy Impact Strength NotchedISD 178at 23 °C15K/lm²SD 179/1AAat 23 °C13K/lm²SD 179/1AAat 30 °C13K/lm²SD 179/1AAat 30 °CK/lm²SD 179/1AAat 30 °C44K/lm²SD 179/1eUat 30 °CK/lm²SD 179/1eUat 30 °CSD 179/1eUSD 179/1eUat 30 °CSD 179/1eUSD 179/1eUat 1.80 MPa (HDT/A)SD 50°C NO SD 179/1eUCoeff of Incent thermal expansion°C NO SD 159/2Coeff of Coeff CoeffSD 1359.2FLAMABILTY PROPERTIESISO 1359.2Comparative Tracking Index60VIEC 60112Lives thickness for VO15mm<	Flexural Modulus			
Haxural strength Instant strength at 23 °C 50 78 at 80 °C MPa 50 178 at 80 °C MPa 50 178 charpy Impact Strength Notched MPa 50 179 1eA at 23 °C 15 M/m ² 50 179 1eA at 23 °C 13 MPa 50 179 1eA at 23 °C 45 Kl/m ² 50 179 1eU at 30 °C 44 Kl/m ² 50 179 1eU at .80 MPa (HDT/A) 44 Kl/m ² 50 179 1eU at 1.80 MPa (HDT/A) 155 °C S0 75 /A coeft. of linear thermal expansion v Vm/m/mK S0 1359-2 FLAMABILITY PROPERTIES Vm/m/mK S0 1359-2 Comparative Tracking Index 600 V IcC 60112 Luset thickness for V0 1.5 mm UL94	at 23 °C	7000	MPa	ISO 178
at 23 °CI30MPaIS0 178at 80 °C60MPaIS0 178Charpy Inpact Strength Notchedis0 179Is0 179/1eAat 23 °C13Kl/m²IS0 179/1eACharpy Inpact unnotchedis0 179/1eAKl/m²IS0 179/1eAat 23 °C45Kl/m²IS0 179/1eUat 30 °C44Kl/m²IS0 179/1eUat 30 °CKl/m²IS0 179/1eUIS0 179/1eUat 30 °C15°CIS0 179/1eUat 30 °CIS0 179/1eUIS0 179/1eUat 30 °CIS0 179/1eUIS0 179/1eUat 1.80 MPa (HDT/A)155°CIS0 75/ACoeff. of linear thermal expansion°CIS0 1359-2FAMAMBILITY PROFERTIESIS0 1359-2IS0 1359-2FAMAMBILITY PROFERTIESIS0 1359-2IS0 1359-2Lowest thickness for V01.5mmUL94GWFIIS0 IS0 IS0 IS0 IS0 IS0 IS0 IS0 IS0 IS0	at 80 °C	4600	MPa	ISO 178
at 80 °C B0 MPa B15 178 Charpy Impact Strength Notched J5 J16 J179 118 at 23 °C J50 179 118 J179 118 Charpy Impact unnotched J179 118 J179 118 at 23 °C J50 179 118 J179 118 at 23 °C J50 179 118 J179 118 THERMAL PROPERTIES J179 118 J179 118 Heat deflection temperature J179 118 J179 118 Good Coff. of Linear thermal expansion °C °C °C °C 718 100 °C °C 718 J179 118 Granger thermal expansion J170 °C 718 718 J179 718 718 FLAMMABILITY PROPERTIES J170 °C 718 718 J179 718 718 Lowest thickness for V0 G00 V 0 J179 718 718 Luse J15 °C 718 718 J179 718 718 Luse J180 718 718 J180 718 718 Luse J180 718 718 718 J180 718 718 Lu	Flexural strength			
Charpy Impact Strength Notched at 23 °C 15 kl/m² Is0 179/1eA at -30 °C 18/m² Is0 179/1eA Charpy Impact unnotched kl/m² Is0 179/1eU at 23 °C 45 kl/m² Is0 179/1eU at -30 °C kl/m² Is0 179/1eU at -30 °C at -30 °C 44 kl/m² Is0 179/1eU THERMAL PROPERTIES Sio 179/1eU Het Adeflection temperature Sio 75/A for fulfiear thermal expansion °C and sio 75/A Sio 75/A FLAMMABILITY PROPERTIES Sio 1359-2 FLAMMABILITY PROPERTIES Sio 1359-2 Gomparative Tracking Index 600 V IEC 60112 Lug4 Sio 75/A Sio 75/A Lug4 Sio 75/A Sio 75/A	at 23 °C	130	MPa	ISO 178
at 23 °C l5 kl/m² l50 179/1eA at -30 °C 13 kl/m² l50 179/1eA Charpy impact unnotched sto 179/1eA at 23 °C 45 kl/m² l50 179/1eU at -30 °C 44 kl/m² l50 179/1eU THERMAL PROPERTIES i50 179/1eU i50 179/1eU Hat 1.80 MPa (HDT/A) 155 °C l50 75/A Coeff. of linear thermal expansion v sto 1359-2 FLAMMABILITY PROPERTIES v sto 1359-2 FLAMMABILITY PROPERTIES v sto 112 Gueget thickness for V0 600 v w sto 112 Lowest thickness for V0 1.5 mm UL94 sto 12	at 80 °C	60	MPa	ISO 178
at -30 °C 13 kl /m² ISO 179/1eA Charpy impact unnotched Kl /m² ISO 179/1eU at 23 °C 45 Kl /m² ISO 179/1eU at -30 °C Kl /m² ISO 179/1eU ISO 179/1eU THERMAL PROPERTIES Kl /m² ISO 179/1eU ISO 179/1eU Heat deflection temperature ISO 179/1eU ISO 179/1eU ISO 179/1eU at 1.80 MPa (HDT/A) 155 °C ISO 75/A ISO 179/1eU Coeff. of linear thermal expansion °C ISO 150 °C ISO 1359-2 ISO 1359-2 FLAMMABILITY PROPERTIES Imm/mK ISO 1359-2 IEC 60112 IEC 60112 U194 ILS Name ILS 6001 Name ILS 6001 ILS 6001 GWFI ILS Imm ILS 6001 Imm ILS 6001 ILS 6001	Charpy Impact Strength Notched			
Charpy impact unnotched if the method is a set of	at 23 °C	15	kJ/m²	ISO 179/1eA
at 23 °C kJ/m² SO 179/1eU at -30 °C kJ/m² SO 179/1eU tt-30 °C kJ/m² SO 179/1eU THERMAL PROPERTIES - - Heat deflection temperature - - at 1.80 MPa (HDT/A) 155 °C co SO 175/A Goeff. of linear thermal expansion - - - -30 °C to 100 °C 55 μm/mK SO 1359-2 FLAMMABILITY PROPERTIES - - - Comparative Tracking Index 600 V IC 60112 Lues 1.5 mm UL 94 GWFI - - -	at -30 °C	13	kJ/m²	ISO 179/1eA
at -30 °C 44 kl/m² ISO 179/1eU THERMAL PROPERTIES F F F Heat deflection temperature S0 75/A S0 75/A at 1.80 MPa (HDT/A) 155 °C and so 75/A Coeff. of linear thermal expansion ym/mK ISO 11359-2 F-AMMABILITY PROPERTIES U F Comparative Tracking Index 600 V IEC 60112 Lowest thickness for V0 1.5 mm UL 94	Charpy impact unnotched			
THERMAL PROPERTIES Heat deflection temperature at 1.80 MPa (HDT/A) 155 °C ISO 75/A Coeff. of linear thermal expansion - - - -30 °C to 100 °C 55 µm/mK ISO 11359-2 FLAMMABILITY PROPERTIES - - - Comparative Tracking Index 600 V IEC 60112 UL94 - - - Cowest thickness for V0 1.5 mm UL 94	at 23 °C	45	kJ/m²	ISO 179/1eU
Heat deflection temperature at 1.80 MPa (HDT/A) 155 °C on ISO 75/A Coeff. of linear thermal expansion	at -30 °C	44	kJ/m²	ISO 179/1eU
at 1.80 MPa (HDT/A) 155 °C ISO 75/A Coeff. of linear thermal expansion -30 °C to 100 °C 55 µm/mK ISO 11359-2 FLAMMABILITY PROPERTIES Comparative Tracking Index 600 V IEC 60112 UL94 1.5 mm UL 94 GWFI	THERMAL PROPERTIES			
Coeff. of linear thermal expansion μm/mK ISO 11359-2 -30 °C to 100 °C 55 μm/mK ISO 11359-2 FLAMMABILITY PROPERTIES 600 V IEC 60112 Comparative Tracking Index 600 V IEC 60112 UL94 1.5 mm UL 94 GWFI 50 50 1.5 mm	Heat deflection temperature			
-30 °C to 100 °C 55 μm/mK ISO 11359-2 FLAMMABILITY PROPERTIES Comparative Tracking Index 600 V IEC 60112 UL94 Lowest thickness for V0 1.5 mm UL 94 GWFI	at 1.80 MPa (HDT/A)	155	°C	ISO 75/A
FLAMMABILITY PROPERTIES V IEC 60112 Comparative Tracking Index 600 V IEC 60112 UL94 IEC 60112 IEC 60112 IEC 60112 Cowest thickness for V0 1.5 mm UL 94 GWFI IEC 60112 IEC 60112 IEC 60112	Coeff. of linear thermal expansion			
Comparative Tracking Index 600 V IEC 60112 UL94 Lowest thickness for V0 1.5 mm UL 94 GWFI	-30 °C to 100 °C	55	µm/mK	ISO 11359-2
UL94 Lowest thickness for VO 1.5 GWFI	FLAMMABILITY PROPERTIES			
Lowest thickness for VO 1.5 mm UL 94 GWFI	Comparative Tracking Index	600	V	IEC 60112
GWFI	UL94			
	Lowest thickness for V0	1.5	mm	UL 94
at 0.8mm 750 °C IEC 60695-2-12	GWFI			
	at 0.8mm	750	°C	IEC 60695-2-12







PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
at 1.6mm	960	°C	IEC 60695-2-12

(1) All measurements on injection molded samples.



