

### Triax 1315 GF

15% glass fiber reinforced, good impact strength, high rigidity and heat resistance.

ISO Shortname: [ABS+PA]

Property	Test Condition	Unit	Standard	Value	
				d.a.m.	cond.
<b>Rheological properties</b>					
C Melt volume-flow rate	260 °C; 5 kg	cm <sup>3</sup> /(10 min)	ISO 1133	2.5	
Molding shrinkage, parallel	150x105x3; 260 °C / MT 80 °C; 300 bar	%	acc. ISO 2577	0.35	0.3
Molding shrinkage, normal	150x105x3; 260 °C / MT 80 °C; 300 bar	%	acc. ISO 2577	0.7	0.6
Post- shrinkage, parallel	150x105x3; 80 °C; 1 h	%	acc. ISO 2577	0.04	
Post- shrinkage, normal	150x105x3; 80 °C; 1 h	%	acc. ISO 2577	0.05	
C Molding shrinkage, parallel	60x60x2; 500 bar	%	ISO 294-4	0,4	
C Molding shrinkage, normal	60x60x2; 500 bar	%	ISO 294-4	0,35	
Post- shrinkage, parallel	60x60x2	%	ISO 294-4	0,15	
Post- shrinkage, normal	60x60x2	%	ISO 294-4	0,05	
<b>Mechanical properties (23 °C/50 % r. h.)</b>					
C Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	4800	4000
C Tensile Stress at break	5 mm/min	MPa	ISO 527-1,-2	82	70
C Tensile Strain at break	5 mm/min	%	ISO 527-1,-2	4.0	5.0
C Charpy impact strength	23 °C	kJ/m <sup>2</sup>	ISO 179-1eU	36	36
C Charpy impact strength	-30 °C	kJ/m <sup>2</sup>	ISO 179-1eU	36	36
C Charpy notched impact strength	23 °C	kJ/m <sup>2</sup>	ISO 179-1eA	10	>= 10
C Charpy notched impact strength	-30 °C	kJ/m <sup>2</sup>	ISO 179-1eA	6.0	>= 6.0
Izod impact strength	23 °C	kJ/m <sup>2</sup>	ISO 180-1U	28	28
Izod impact strength	-30 °C	kJ/m <sup>2</sup>	ISO 180-1U	28	28
Izod notched impact strength	23 °C	kJ/m <sup>2</sup>	ISO 180-1A	10	10
Izod notched impact strength	-30 °C	kJ/m <sup>2</sup>	ISO 180-1A	6	>=6
Flexural modulus	2 mm/min	MPa	ISO 178	4100	3600
Flexural strength	2 mm/min	MPa	ISO 178	110	98
Flexural strain at flexural strength	2 mm/min	%	ISO 178	4.0	5.0
Flexural stress at 3.5 % strain	2 mm/min	MPa	ISO 178	108	96
<b>Thermal properties</b>					
C Temperature of deflection under load	1.80 MPa	°C	ISO 75-1,-2	95	98
C Temperature of deflection under load	0.45 MPa	°C	ISO 75-1,-2	175	170
C Vicat softening temperature	50 N; 50 °C/h	°C	ISO 306	112	100
Vicat softening temperature	10 N; 120 °C/h	°C	ISO 306	195	175
C Coefficient of linear thermal expansion, parallel	23 to 55 °C	10 <sup>-4</sup> /K	ISO 11359-1,-2	0.4	
C Coefficient of linear thermal expansion, transverse	23 to 55 °C	10 <sup>-4</sup> /K	ISO 11359-1,-2	1.2	
C Burning behavior UL 94 (1.6 mm)		Class	UL 94	HB	
<b>Electrical properties (23 °C/50 % r. h.)</b>					
C Relative permittivity	100 Hz	-	IEC 60250	4,6	7,9

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C Relative permittivity	1 MHz	-	IEC 60250	3,8	4
C Dissipation factor	100 Hz	10 <sup>-4</sup>	IEC 60250	320	1100
C Dissipation factor	1 MHz	10 <sup>-4</sup>	IEC 60250	280	700
C Volume resistivity		Ohm-m	IEC 60093	1E12	1E10
C Surface resistivity		Ohm	IEC 60093	1E13	1E13
C Electric strength	1 mm	kV/mm	IEC 60243-1	40	36
C Comparative tracking index CTI	Solution A	Rating	IEC 60112	600	
<b>Other properties (23 °C)</b>					
C Water absorption (Saturation value)	Water at 23 °C	%	ISO 62	~3,8	
C Water absorption (Equilibrium value)	23 °C; 50 % RH	%	ISO 62	~1.3	
C Density		kg/m <sup>3</sup>	ISO 1183	1170	
Glass fiber / glass bead / filler content		%	ISO 3451-1	15	
<b>Processing conditions for test specimens</b>					
C Injection molding-Melt temperature		°C	ISO 294	260	
C Injection molding-Mold temperature		°C	ISO 294	80	
C Injection molding-Injection velocity		mm/s	ISO 294	40	

C These property characteristics are taken from the CAMPUS plastics data bank and are based on the international catalogue of basic data for plastics according to ISO 10350.

### Disclaimer

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Test values

Unless specified to the contrary, the values given have been established on standardized test specimens at room temperature. The figures should be regarded as guide values only and not as binding minimum values. Kindly note that, under certain conditions, the properties can be affected to a considerable extent by the design of the mould/die, the processing conditions and the colouring.

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