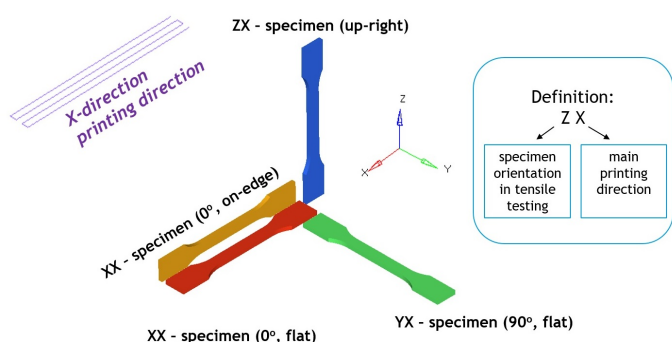


# Novamid® ID1030-CF10 (F)

## PA6/66-CF10

3D printing grade, 10% Carbon Reinforced

Print Date: 2022-03-18



Properties	Typical Data	Unit	Test Method
<b>Mechanical properties (injection molded)</b>			
dry / cond			
Tensile modulus	7570 / -	MPa	ISO 527-1/-2
Yield stress	110 / -	MPa	ISO 527-1/-2
Yield strain	2.8 / -	%	ISO 527-1/-2
Stress at break	110 / -	MPa	ISO 527-1/-2
Strain at break	3 / -	%	ISO 527-1/-2
<b>Mechanical Properties (3D printed)</b>			
dry / cond			
Tensile modulus (X-X direction, flat)	7630 / -	MPa	Sim. to ISO 527-1/-2
Tensile modulus (Y-X direction, flat)	2720 / -	MPa	Sim. to ISO 527-1/-2
Tensile modulus (X-X direction, on-edge)	8660 / 3250	MPa	Sim. to ISO 527-1/-2
Tensile modulus (Z-X direction, up-right)	2530 / 550	MPa	Sim. to ISO 527-1/-2
Stress at yield (X-X direction, flat)	110 / -	MPa	Sim. to ISO 527-1/-2
Stress at yield (Y-X direction, flat)	63 / -	MPa	Sim. to ISO 527-1/-2
Stress at yield (X-X direction, on-edge)	134 / 63	MPa	Sim. to ISO 527-1/-2

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# Novamid<sup>®</sup> ID1030-CF10 (F)

Print Date: 2022-03-18

Properties	Typical Data	Unit	Test Method
Stress at yield (Z-X direction, up-right)	38 / 18	MPa	Sim. to ISO 527-1/-2
Strain at yield (X-X direction, flat)	2.5 / -	%	Sim. to ISO 527-1/-2
Strain at yield (Y-X direction, flat)	3 / -	%	Sim. to ISO 527-1/-2
Strain at yield (X-X direction, on-edge)	2.8 / 6	%	Sim. to ISO 527-1/-2
Strain at yield (Z-X direction, up-right)	1.8 / 7	%	Sim. to ISO 527-1/-2
Stress at break (X-X direction, flat)	110 / -	MPa	Sim. to ISO 527-1/-2
Stress at break (Y-X direction, flat)	58 / -	MPa	Sim. to ISO 527-1/-2
Stress at break (X-X direction, on-edge)	131 / 13	MPa	Sim. to ISO 527-1/-2
Stress at break (Z-X direction, up-right)	38 / 18	MPa	Sim. to ISO 527-1/-2
Strain at break (X-X direction, flat)	2.2 / -	%	Sim. to ISO 527-1/-2
Strain at break (Y-X direction, flat)	4.5 / -	%	Sim. to ISO 527-1/-2
Strain at break (X-X direction, on-edge)	3 / 25	%	Sim. to ISO 527-1/-2
Strain at break (Z-X direction, up-right)	1.8 / 7	%	Sim. to ISO 527-1/-2
Flexural modulus (X-X direction, on-edge)	8130 / 3000	MPa	Sim. to ISO 178
Flexural modulus (Z-X direction, up-right)	2420 / 590	MPa	Sim. to ISO 178
Flexural strength (X-X direction, on-edge)	200 / 90	MPa	Sim. to ISO 178
Flexural strength (Z-X direction, up-right)	70 / 30	MPa	Sim. to ISO 178
<b>Thermal properties</b>	<b>dry / cond</b>		
Melting temperature (10°C/min)	200 / *	°C	ISO 11357-1/-3
Glass transition temperature (10°C/min)	58 / *	°C	ISO 11357-1/-2
<b>Thermal properties (injection molded)</b>	<b>dry / cond</b>		
Temp. of deflection under load (1.80 MPa)	153 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	184 / *	°C	ISO 75-1/-2
<b>Other properties</b>	<b>dry / cond</b>		
Humidity absorption	2.5 / *	%	Sim. to ISO 62
Density	1170 / -	kg/m <sup>3</sup>	ISO 1183

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