

BIQU PLA filament:
3D printing temperature: 220°C

Average			
Tensile	test 1	test 2	Tensile [kg]
BIQU PLA	44.4	42.8	43.6

Minimal area: 4x4 mm

Impact test
based on ISO 180 (IZOD test specimen)

Tensile	dist from 0 [mm]	E _{break} [J]
BIQU PLA	141	0.692

$$E_{br} = m * g * H = 0.5 \text{ kg} * 9.81 \text{ m/s}^2 * H \text{ [m]}$$

Test specimen: 80x10x4, notch 2mm deep, ISO 180

Average			
Layer adhesion	test 1	test 2	Layer adh [kg]
BIQU PLA (220°C)	8.35	5.35	6.85
BIQU PLA (235°C)	9.15	9.2	9.175

Minimal area: 4x4 mm

Torque (twist) test

Torque	test 1	test 2	Torque [Nm]	twists
BIQU PLA	0.4	0.4	0.4	180°

Test specimen: D6 mm, 30 mm length of the cylindrical part

Average			
Shear	test 1	test 2	Shear [kg]
BIQU PLA	83.8	91.4	87.6

Double shear area
2 x Ø5 mm

Temperature test, first movement at:

Temp	°C
BIQU PLA	50

BIQU PLA FILAMENT
MyTechFun, 2021-06-03

Bending	2 mm deform	kg	Break	kg
BIQU PLA	7.625		11.45	

*Based is ISO 178
distance between supports: 50 mm
Test specimen dimensions: 80x10x4 mm