



High Strength PLA

Process: FFF - Fused Filament Fabrication

PLA or Polylactic Acid is a filament specifically made for FFF 3D printing. Regular PLA is generally strong material but under certain circumstances can be considered brittle. With this high strength PLA, those negative qualities have been eliminated and has very similar mechanical properties to that of ABS filament for the FFF process. PLA part applications can be used for initial durable prototypes to test form and fit.

MECHANICAL PROPERTIES	TEST METHOD	METRIC	IMPERIAL
Young's Modulus	D 638	1879 Mpa	272.5 ksi
Tensile Strength	D 638	28.1 Mpa	4075.5 psi
Elongation at Break	D 638	1.36%	1.36%
Bending Modulus	D 790	2119 Mpa	307.3 ksi
Bending Strength	D 790	48 MPa	6961.8 ksi
Impact Strength	D 256	12.15 kJ/m ²	5.78 ft lb/in ²
Colors		Request Availability	
THERMAL PROPERTIES	TEST METHOD	METRIC	IMPERIAL
Glass Transition Temperature (TG)	DSC, 10o/min	50-60 deg. C	122-140 deg. F

Note: Materials specified are stocked materials, other materials may be available upon request. The information on the material properties are obtained from the material manufacture and SICAM expressly disclaims any product warranties and cannot guarantee the accuracy of the information presented.