

Rizium™ One

3D Printing Filament



RIZIUM ONE 3D printing filament is a UL 2904 Certified and USP Class VI Certified Material. RIZIUM ONE is an engineering grade, amorphous polymer designed for high strength, superior layer adhesion, long-term stability, and clean operation.

- Best-in-class Z-strength
 - Zero VOC emissions
 - Low moisture absorption
 - UL GREENGUARD 2904 Certified
 - USP Class VI Certified Material
- Compatible with RIZIUM™ family of material enhancers:
 - RIZIUM™ Marking Ink
 - RIZIUM™ Release Agent



Flexural Strength (max strain, 23°C)

XY 72 MPa
XZ 75 MPa
ZX 66 MPa

XY 10.4 Kpsi
XZ 10.8 Kpsi
ZX 9.5 Kpsi

Flexural Modulus

1724 MPa
1766 MPa
1535 MPa

250 Kpsi
256 Kpsi
222 Kpsi



Tests performed with parts printed on RIZE™ ONE printer using solid infill. Test method: ISO 178, method A



Volume Resistivity, Ω -cm > 10^{16} (insulative)
Dielectric Constant 2.2
Dielectric Breakdown, KV/mm 70



Glass Transition, C 99°
Heat Deflection (HDT), C 86°
Flame Classification UL94-HB



Specific Gravity 1.01 g/cm³
Moisture Absorption < .01%

Chemically resistant to acids, alcohols, and ketones.



VOC Emissions Passes UL GREENGUARD 2904
Health USP Class VI Certified
Venting Requirements None
Residual Metals Content < .02 ppm



Packaging 50 in³ (820g) spool, individual carton
Shelf Life One year
Storage Requirements Store in carton until ready for use

Specifications are subject to change without notice. Data presented are actual measured values and not guaranteed specifications. They do not guarantee performance level under actual usage. Actual user results can vary based on part design, application, user, operating and testing conditions and more. Users are responsible for determining that RIZE™ materials are lawful and technically suitable for their applications and for disposal or recycling methods according to applicable environmental laws and regulations. Rize Inc. makes no warranties of any kind, express or implied, including, but not limited to, the warranties of merchantability, fitness for a particular use or warranty against patent infringement.