

Technical Parameters and Peformance Index

Liquid performance index		
Test items	Value	
Types	LCD light curing resin	
Number	ZS-405-R935	
color	Transparent green	
Viscosity 粘度 (25 ℃)	125cps	
Use wavelength	395nm~405nm	

Product performance index		
Test items	Detection method	ZS-405-R935
Tensile strength (MPa)	ASTM D638M	35 MPa
Elongation at break (%)	ASTM D638	9%
Flexural strength (MPa)	ASTM D790	75
Impact strength (J/m)	ASTM D256	13J/m
Water absorption (%)	ASTM D570	0.93
Hardness (D)	ASTM D2240	85D
Heat distortion temperature ($^{\circ}$ C)	ASTMD648 0.45MPa	85°C
Printing parameters		
Conventional exposure time	2.5s~3s (Mono screen);	
	8~12s (RGB screen)	
Bottom exposure time	15s~25s	
Printable layer thickness	0.05mm	

All parameters are determined based on ASTM test standards where the mechanical properties splines are printed under the following conditions:

Anycubic Mono printer, bottom exposure time = 20s, normal exposure time = 2.5s, support density = 98%, the placement direction is that the longest side of the spline is perpendicular to the bottom surface, and the resin color is transparent.

After printing, the splines were washed and the supports were removed and placed at room temperature for 24 hours, and then post-curing was performed. The post-curing method was to soak the splines in water for 15 minutes on both sides, and irradiate each side for 30 s. After post-curing, it was placed for 24 hours to relieve stress, and then the mechanical data was measured.

