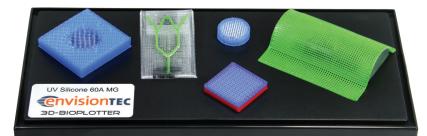
UV Silicone 60A MG



Silicone was the first material printed by the prototype 3D-Bioplotter in 2000. This very versatile material can be used for numerous demo applications: from trying out new shapes and patterns using a cheap material; through making technical parts (e.g. gaskets); to medical device casings. There are also many medical applications for silicones: from soft implants (e.g. ears, noses, breasts); through wound dressings; to surgical planning models, amongst others. With curing directly during printing using UV, this medical grade silicone (USP Class VI) is mainly aimed at research applications as well as direct skin contact for a maximum of 29 days. This silicone displays low shrinkage, a medium hardness around 60 Shore and has no smell. By adding LSR color pastes prior to printing, the transparent material can be colored to the specific application requirements.

Material Properties ²	
Description	Value
Material Type	Silicone
Curing System	UV
Appearance (Color)	Translucent / color possible using pastes
Appearance (Form)	Gel
Pot Life (20°C, closed)	3 days after mixing
Viscosity	600 Pas
Processing Temperature	Room Temperature
Printing Surface	Polypropylene Film
Processing Parameters Available For	0.3mm / 0.4mm needle tips
Printing Speed (at 2 - 5 Bar Pressure)	5 - 20 mm/sec
Grade	USP Class VI
Degradation Period in Biological Systems	No degradation measurable
Shore Hardness	60

Typical Applications

Wound dressings, sensor casings, custom microvascularization plates

Recommended 3D Printer Family

3D-Bioplotter

¹ Learn more at EnvisionTEC.com/printmypart

² All data provided is preliminary and must be verified by the individual user