

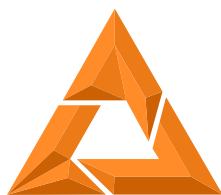
# RED BIORES

## MEDICAL/WEARABLE

Photopolymer Resin for B9 Core Med

Material Properties

Prepared: 04.06.2020



**B9Creations**

*Digital Manufacturing Technology*

Ideal for medical manufacturing, clinical, and consumer tech environments, BioRes – Red Medical/Wearable is ISO 10993 biocompatible for prolonged skin contact of up to 30 days.

Durable, impact resistant, and polishable, this material is ideal for rapid prototyping of medical devices to production runs of thousands, surgical tools, anatomical models, medical research, and wearable technology.

	METRIC	IMPERIAL	METHOD
<b>TENSILE PROPERTIES</b>			
Tensile Strength	47 MPa	6.8 ksi	ASTM D638 Type IV
Tensile Modulus	2140 MPa	310.4 ksi	ASTM D638 Type IV
Elongation	5.5%	5.5%	ASTM D638 Type IV
<b>FLEXURAL PROPERTIES</b>			
Flexural Strength	74 MPa	10.7 ksi	ISO 178
Flexural Modulus	1900 MPa	275.6 ksi	ISO 178
<b>IMPACT PROPERTIES</b>			
IZOD Impact Strength (notched)	13 J/m	.24 ft-lbf/in	ASTM D256
IZOD Impact Strength (unnotched)	161 J/m	3 ft-lbf/in	ASTM D4812
<b>TEMPERATURE PROPERTIES</b>			
Heat Deflection Temp @ 1.80 MPa	46 °C	114.8 °F	ISO 75
Heat Deflection Temp @ 0.45 MPa	68 °C	154.4 °F	ISO 75
<b>SHORE "D" HARDNESS</b>			
	85	85	ASTM D2240
<b>VISCOSITY</b>			
	1400 CPS @ 26 °C	1400 CPS @ 79 °F	
<b>SPECIFIC GRAVITY</b>			
	1.116	1.116	
<b>DENSITY</b>			
	1.13 g/mL	9.31 Lbs/Gallon	

\*All results were from models cured for 20 minutes at 405 nm