

Black Resin

Photopolymer Resin for B9 Core Series

Material Properties

Prepared: 07.11.2018

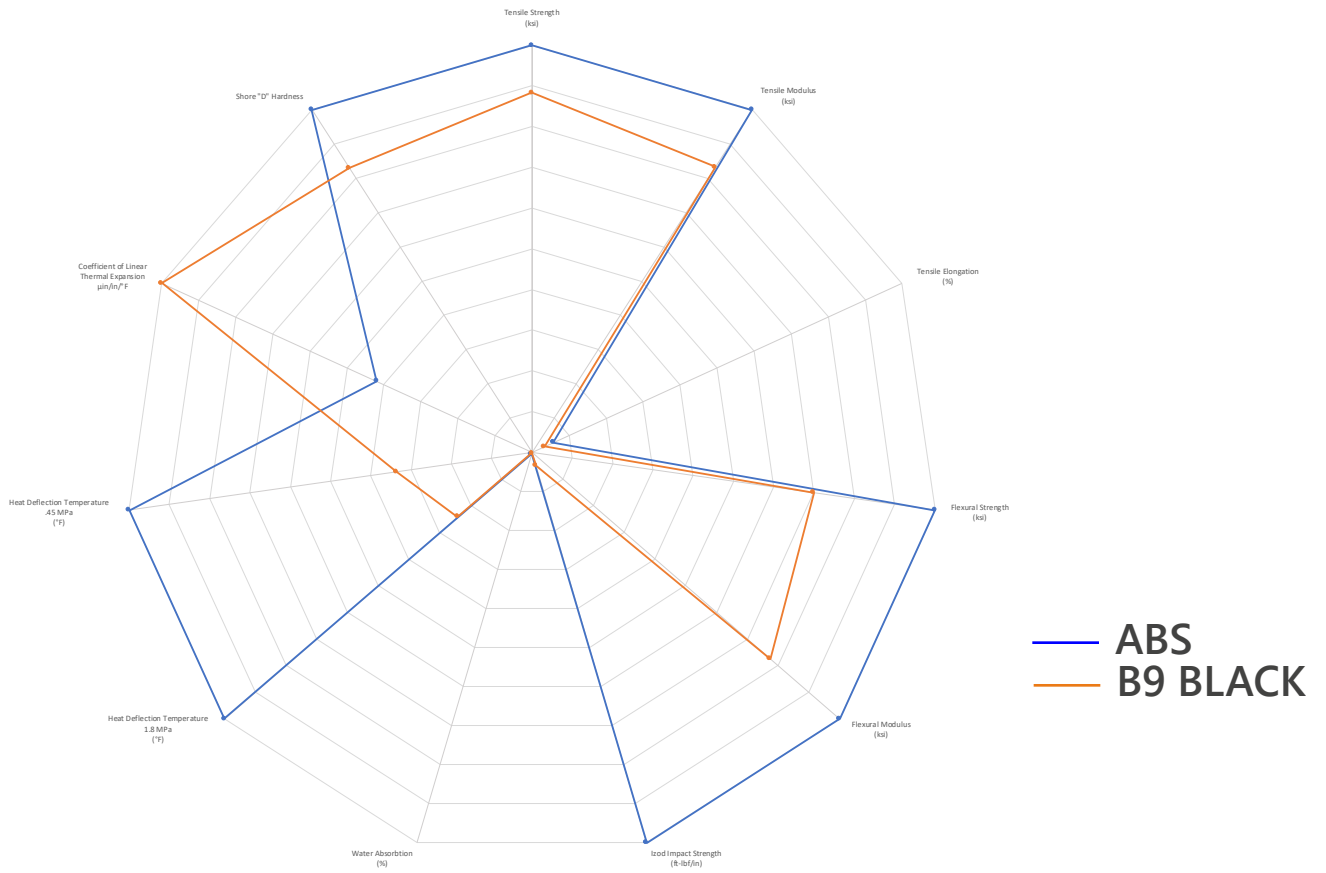
B9Creations' Black Resin is the ideal material for achieving requirements such as dimensional accuracy, strength, and temperature resistance. This material maintains its shape and dimension through curing and is capable of extreme build speeds, reaching 100+ mm per hour, without sacrificing the surface quality.

Paired with the B9 Core Series, Black Resin offers incredible detail, perfect for your model's finest features. A high-strength, fast-curing resin, it's also perfect for vulcanized mold-making.

	METRIC	IMPERIAL	METHOD
TENSILE PROPERTIES			
Tensile Strength	36.5 MPa	5.29 ksi	ASTM D638-14
Tensile Modulus	1750 MPa	253.82 ksi	ASTM D638-14
Elongation	3.4%	3.4%	ASTM D638-14
FLEXURAL PROPERTIES			
Flexural Strength	45.0 MPa	6.53 ksi	ISO 178 (2010)
Flexural Modulus	1.82 GPa	263.97 ksi	ISO 178 (2010)
IMPACT PROPERTIES			
IZOD Impact Strength	11.4 J/m	0.21 ft-lbf/in	ASTM D256-10
TEMPERATURE PROPERTIES			
Heat Deflection Temp @ 1.80 MPa	49 °C	120.2 °F	ISO 75-1, ISO 75-2 (2013)
Heat Deflection Temp @ 0.45 MPa	65 °C	149 °F	ISO 75-1, ISO 75-2 (2013)
Thermal Expansion	209 µm/m-°C	116.11 µin/in-°F	ASTM E831-14
SHORE "D" HARDNESS			
	83	83	ASTM D2240-15
VISCOSITY			
	~300 cP @ 25 °C	~300 cP @ 77 °F	
SPECIFIC GRAVITY			
	1.06	1.06	
DENSITY			
	1.08-1.14 g/mL	9-9.5 Lbs/Gallon	

*All results were from samples cured for 5 minutes.

ABS vs. B9Creations Black Material Properties



[REQUEST A SAMPLE >>](#)