

DPR 10

DPR 10 is a material for dental model production.

Tensile Properties	GREEN STATE ASTM D638, Type V, 10 mm/min		UV-CURED ASTM D638, Type V, 1 mm/min	
	Metric	U.S.	Metric	U.S.
Tensile Modulus	770 ± 200 MPa	110 ± 25 ksi	1450 ± 50 MPa	210 ± 6 ksi
Ultimate Tensile Strength	29 ± 3 MPa	4.2 ± 0.4 ksi	46 ± 4 MPa	6.6 ± 0.6 ksi
Tensile Strength at Yield	29 ± 3 MPa	4.2 ± 0.4 ksi		
Elongation at Break	22 ± 6 %		4 ± 1 %	

Flexural Properties ASTM D790-A	GREEN STATE		UV-CURED	
	Metric	U.S.	Metric	U.S.
Flexural Strength	40 ± 5 MPa	5.8 ± 0.7 ksi	80 ± 5 MPa	11 ± 1 ksi
Flexural Modulus	1200 ± 100 MPa	175 ± 15 ksi	2250 ± 250 MPa	330 ± 30 ksi

Impact Properties	UV-CURED	
	Metric	U.S.
Notched Izod (Machined), ASTM D256	20 ± 1 J/m	0.36 ± 0.4 ft-lb/in
Unnotched Izod, ASTM D4812	170 ± 20 J/m	3.1 ± 0.3 ft-lb/in

Thermal Properties ASTM D648	UV-CURED	
	Metric	U.S.
Heat Deflection Temperature @ 0.455 MPa/66 psi	61 °C	142 °F
Heat Deflection Temperature @ 1.82 MPa/264 psi	45 °C	113 °F

General Properties	Metric
Density (liquid resin)	1.10 g/cm ³

NOTES—Results in this data sheet are representative of specific sample generation and testing processes and may vary if the established protocols are not followed. Contact Carbon for the specific process used to generate the test samples to determine each of these values. Tensile and flexural data are average ± 1 standard deviation from 16 specimens; impact data used 10 specimens. The U.S. values are converted from Metric measurements and are for reference only.

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