

Model MD800

A fast-printing material for production of high-accuracy restorative models

Model MD800 is engineered to meet the demanding standards of precision, reliability, and efficiency essential in restorative dentistry. It produces highly accurate models and dies, featuring crisp margins and precise contacts, ensuring superior quality results even under tight deadlines

Crown and bridge models

Orthodontic models

Implant analog models

Diagnostic models



Available Color to Order; Gray, Blue and Pink

	METRIC 1		IMPERIAL 1		METHOD
	Green 2	Post-Cured 3	Green 2	Post-Cured 3	
Mechanical Properties					
Ultimate Tensile Strength	27 MPa	48 MPa	3970 psi	6990 psi	ASTM D 638-14
Tensile Modulus	1.1 GPa	2.3 GPa	160 ksi	331 ksi	ASTM D 638-14
Elongation at Break	14%	4.8%	14%	4.8%	ASTM D 638-14
Flexural Properties					
Flexural Strength	25 MPa	85 MPa	3640 psi	12300 psi	ASTM D 790-15
Flexural Modulus	0.67 GPa	2.2 GPa	97 ksi	320 ksi	ASTM D 790-15
Impact Properties					
Notched Izod	23 J/m	24 J/m	0.43 ft-lbs/in	0.45 ft-lbs/in	ASTM D 256-10
Unnotched Izod	300 J/m	325 J/m	5.6 ft-lbs/in	6.1 ft-lbs/in	ASTM D 4812-19
Thermal Properties					
Heat Deflection Temp. @ 1.8 MPa	41 °C	56 °C	104 °F	133 °F	ASTM D 648-16
Heat Deflection Temp. @ 0.45 MPa	7 °C	75 °C	117 °F	167 °F	ASTM D 648-16
Thermal Expansion	108 µm/m/°C	76 µm/m/°C	60 µin/in/°F	43 µin/in/°F	ASTM E 813-13

1 Material properties may vary based on part geometry, print orientation, print settings, and temperature.
2 Data for green samples were measured on Type IV tensile bars printed on a Form 3 printer with 100 µm Model Resin settings and washed in a Form Wash for 10 minutes in ≥99% Isopropyl Alcohol.
3 Data for post-cured samples were measured on Type IV tensile bars printed on a Form 3 printer with 100 µm Model Resin settings, washed in a Form Wash for 10 minutes in ≥99% Isopropyl Alcohol, and post-cured at 60°C for 5 minutes in a Form Cure.

SOLVENT COMPATIBILITY

Percent weight gain over 24 hours for a printed and post-cured 1 x 1 x 1 cm cube immersed in respective solvent:

Solvent	24 hr weight gain, %	Solvent	24 hr weight gain, %
Acetic Acid 5%	0.2	Mineral oil, heavy	0.2
Acetone	0.9	Mineral oil, light	0.2
Bleach ~5% NaOCl	0.1	Salt Water (3.5% NaCl)	0.2
Butyl Acetate	< 0.1	Skydrol 5	0.4
Diesel Fuel	0.1	Sodium hydroxide solution (0.025% pH = 10)	0.2
Diethyl glycol r monomethyl ether	< 0.1	Strong Acid (HCl Conc)	< 0.1
Hydraulic Oil	0.1	TPM	0.2
Hydrogen peroxide (3%)	0.1	Water	0.2
Isooctane	< 0.1	Xylene	< 0.1
Isopropyl Alcohol	< 0.1		

