

Night Guard

Dental Night Guard for Clear Aligners and Fast Printing

DNG enables the direct printing of retainers, nightguards, and dental splints with a clear material and minimal postprocessing. Uniquely engineered for the 3D printing at high speeds enabling maximum throughput. DNG possesses industry leading toughness and biocompatibility.

Applications:

Night guard, Splint, Retainer for aligner, Retainer, Maintainer, and other orthodontics appliance.



Strong



Flexible



Transparent



Durable



DNG

DNG

Dental Night Guard 1-DLP

Luxcreo's Dental Material DNG is a light-curing resin for the 3D printing of orthodontic applications for use with DLP printers (385-405nm).

Composition: : methacrylate, photo-initiator, inhibitor, and pigment

Tensile Properties, ASTM D638		Metric	U.S.
Tensile Modulus	2127 MPa		308.5 ksi
Ultimate Tensile Strength	39 MPa		5.8 ksi
Elongation at Break	14.0 %		14.0 %
Tensile Strength at Yield	53 MPa		7.7 ksi
Elongation at Yield	4.2 %		4.2 %
Impact Properties, ASTM D256		Metric	U.S.
Notched Izod (Machined), 23°C	36.7 J/m		0.69 ft-lbf/in
Flexural Properties, ASTM D790		Metric	U.S.
Flexural Strength	80 MPa		11.7 ksi
Flexural Modulus	2037 MPa		295.4 ksi
Thermal Properties, ASTM D648		Metric	U.S.
Heat Deflection Temperature @0.455 MPa/66 psi	71.6 °C		160.8 °F
General Properties		Metric	
Shore Hardness, ASTM D2240	82D		
Density (liquid resin)	1.076 g/cm ³		
Density, ASTM D792	1.143 g/cm ³		

These data were determined in accordance with ISO and ASTM standards and are pursuant to LuxCreo Quality System. This document is valid without signature.

These data are typical values and were determined through testing on printers which are validated for use with LuxCreo's products. Mechanical properties will vary based on machine, part orientation, machine type, machine power, post curing of the printed parts, and cleaning. See product guide for post-processing procedure and best practices. Improper use or failure to adhere to the product guide may result in variations of color and mechanical properties. This product is suitable for the manufacturing of night guards, splints, retainers for aligners, retainers, maintainers and other orthodontics appliance. LuxCreo reserves the right to change material characteristics, and formulation without prior notification.