

# DCA

## Clear Aligner & Retainer Resin

DCA is a major breakthrough in digital dental industry which is used for LuxCreo "direct" print aligners & retainers based on Digital Polishing platform. It maintains high transparency and good accuracy. LuxAlign Clear Aligner printed by DCA has passed FDA 510(k) certification and completed CE IIA.

ISO Standard	Tested Property	Test Result
ISO 10993-10:2010	Oral Mucosa Irritation and Skin Sensitization	Pass
ISO 10993-5:2009	In Vitro Cytotoxicity	Pass
ISO 10993-11:2017	Acute Systemic Toxicity and Subchronic Systemic Toxicity	Pass
ISO 10993-3:2014	Genetic Toxicity	Pass
ISO 10993-6:2016	Subcutaneous Implantation	Pass



Transparent



Accurate



Transparency



Fast



Biocompatible

## DCA Technical Data Sheet:

Tensile Properties, ASTM D638	Metric	U.S.
Tensile Modulus	990 MPa	143.57 ksi
Ultimate Tensile Strength	34.93 MPa	5.66 ksi
Elongation at Break	60.44 %	60.44 %
Tensile Strength at Yield	23.45 MPa	3.40 ksi
Elongation at Yield	4.41 %	4.41 %
Impact Properties	Metric	U.S.
Notched Izod (Machined), 23°C, ISO 180/A	4.46 KJ/m <sup>2</sup>	2.14 ft-lbf/in
Flexural Properties, ASTM D790	Metric	U.S.
Flexural Strength	38.45 MPa	5.57 ksi
Flexural Modulus	1219 MPa	176.8 ksi
General Properties	Metric	
Density (cured resin), ASTM D792	1.11 g/cm <sup>3</sup>	
Density (liquid resin), ASTM D4052	1.04 g/cm <sup>3</sup>	

The above TDS data is tested and verified in LuxCreo's 3D printing system. The mechanical properties of the material may vary based on print orientation, print settings and the choice of post-process technology. Please refer to LuxCreo's material "Application Guide" or consult after-sales to select suitable parameters for best performance of the material. Improper use of materials or non-compliance with material "Application Guide" may result in changes in mechanical properties and colors. LuxCreo reserves the right to change material properties and formulations without notice.