IBT Resin

A flexible material that enables efficient, accurate orthodontic bracket placement

Use IBT Resin to 3D print indirect bonding trays for a cost-effective, rapid dental bracket placement process for high quality orthodontics. IBT Resin prints full arch and quadrant bracket transfer trays quickly using 100 micron layer heights, reducing labor time and enabling higher throughput.



	Post-Cured 1,2	Method
Ultimate Tensile Strength	≥ 5 MPa	ASTM D638
Young's Modulus	> 16 MPa	ASTM D638
Elongation	> 25%	ASTM D638
Hardness Shore A	< 90A	ASTM D2240

Disinfection Compatibility	
Chemical Disinfection	70% Isopropyl Alcohol for 5 minutes

IBT Resin is a Class I Medical Device as defined in Article 2 of the Medical Device Regulation 2017/74 (MDR) in the EU and in Section 201(h) of the Federal Food Drug & Cosmetic (FD&C) Act.

IBT Resin has been evaluated in accordance with ISO 10993-1, Biological evaluation of medical devices - Part 1: Evaluation and testing within a risk management process, and ISO 7405, Dentistry - Evaluation of biocompatibility of medical devices used in dentistry, and passed the requirements for the following biocompatibility risks:

ISO Standard	Description ³
EN ISO 10993-5	Not cytotoxic
EN ISO 10993-10	Not an irritant
EN ISO 10993-10	Not a sensitizer

The product was developed and is in compliance with the following ISO Standards:

ISO Standard	Description
EN ISO 13485	Medical Devices – Quality Management Systems – Requirements for Regulatory Purposes
EN ISO 14971	Medical Devices – Application of Risk Management to Medical Devices

Material properties may vary based on part geometry, print orientation, print settings, temperature, and disinfection or sterilization methods used.

 $^{^2}$ Data were measured on post-cured samples printed on a Form 3B with 100um IBT Resin settings, washed in a Form Wash for 20 minutes in $\geq 99\%$ Isopropyl Alcohol, and post-cured at 60°C for 60 minutes in a Form Cure.

³ IBT Resin was tested at NAMSA World Headquarters, OH, USA.