RF-DB-04 Resin

RF-DB-04 is a high-precision transparent implant guide and locator resin material, with good biocompatibility. After molding, the implant guide has a colorless and transparent appearance, which is easy to observe during the surgical process. Its high resolution and detail presentation power can fit well with the patient's jawbone and assist in precise positioning of drill bits and implants during implant surgery. This material features fast forming speed, high forming precision and ultra-high surface hardness.



MATERIAL STATUS	
Applications	Dental implant surgical guides
Appearance	Clear
Form	Resin
Processing method	(surface exposure molding)LCD (surface exposure molding)DLP
Characteristics	High strength、Transparen High precision、Fast forming

PHYSICAL PROPERTIES	Testing method	Typical value
Density	ASTM D792	1.05-1.15 g/cm³
Viscosity	ASTM D445	200 mPa•s
Hardness	ASTM D2240	83-87 ShoreD
MECHANICAL PROPERTIES.		
Tensile Strength	ASTM D638	61.4 MPa
Elongation at Break	ASTM D638	13.2 %
Flexural Strength	ASTM D790	65.6 MPa
Flexural Modulus	ASTM D790	1700 MPa
HDT@ 0.45 MPa	ASTM D648	69 ℃

*The above parameters are for reference only. The performance of cured materials will be affected by factors such as equipment, environment, parameter settings, post-processing methods, and testing methods, which will cause great differences. Please contact us if necessary

Room 302, Building 3, Guole Science and Technology Park, 1 Lirong Road, Dalang Subdistric, Longhua District, Shenzhen, Guangdong,China
Tel: +86 755 27615363
Email:
info@rayformtech.com
www.rayformtech.com

PRINT PARAMETERS

Representative Machine	Exposure Time/s	Bottom Exposure Time/s	Bottom Layer Count	Lift Distance/mm	Lift Speed /mm •min^{-1}	Retract Speed /mm •min^{-1}
Phrozen sonic mini8K S	3.7	25	3	4+4	60+180	180+60
Elegoo saturn 4 Ultra	2.2	25	3	Default standard parameters of the device		
Elegoo saturn 3 Ultra	2.6	25	3	4+4	120+240	120+240
Creality HALOT-MAGE Pro	1.2	15	3	8	180+240	240+180
Anycubic Photon Mono 4 Ultra	2.2	25	3	4+4	120+240	240+120
Anycubic Photon Mono M7 Pro	2	20	3	4+4	120+180	180+120

*Post-Processing Procedure and Note

1.The model can be cleaned using isopropyl alcohol in the ultrasonic cleaning machine, and try not to use high-frequency shock or force brushing the model to avoid damage to the surface details of the model.

2.Thoroughly blow the model dry with a hair dryer or the like;

3. It is recommended to remove the support for model with supports first, and then post-cure treatment. If you remove the supports after it's been post-cured , it will easily cause damage to the contact surface of the support point;

4. For some occasions where certain toughness is required, you can choose to cure with UV lamp for 5 minutes. The printed parts should be kept in a cool dry place.

*Safety Precautions

1.Eye Contact: Immediately flush with plenty of clean water (under eye lids) for at least 20 minutes. Hold eyelids apart to ensure flushing. Washing within one minute of contact is essential to achieve maximum effectiveness. Seek medical attention immediately.

2.Skin Contact:Remove contaminated clothing and rinse contact area thoroughly with soap and water.

3.Liquid resin must avoid contact with food, drink and human tissue. Only fully cleaned and properly post-cured printed components may be used for intra-oral dental guide applications.

4.For additional information please see the Material Safety Data Sheet.

*Safety Precautions

Please store in a cool place below 25 degrees Celsius, away from direct sunlight. Ordinary visible light may cause the resin to polymerize and gel.

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