

# Dental Indirect Bonding Tray Resin 3D Printing Material

RF-IR-14



- Biocompatible
- Flexibility
- Transparent
- Support OEM/ODM servies



Breakthrough light-curing resin designed for moderndigital orthodontics, providing a new indirect bonding solution of precise, efficient andnon-invasive. Through intelligent mechanical adaptation and biological functional design, its innovative formula achieves sub-milimeter accuracy in the positioning of brackets, make it fits the complex dentition morphology perfectly, it can resist chemical corrosionand mechanical stress in clinical operations, providing seamless collaborative treatmentexperience for doctors and patients.

Applications:	Dental model	Color:	Semi- Transparent	Material:	Resin
Applicable printer type:	DLP and LCD 3D printer		Characteristics:	Easy to remove 、Non-Stick	

Physical properties	Testing method	Typical value
Density	ASTM D792	1.04-1.10 g/cm3
Viscosity	ASTM D445	<1000 mPa •s
Hardness	ASTM D2240	30 ShoreD
Mechanical properties		
Tensile Modulus	ASTM D638	35 MPa
Elongation at Break	ASTM D638	>140 %
Tensile Strength	ASTM D638	12 MPa
Solubility	ISO 20795-2	3.5 ug/mm³

Note: 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 differences. Please contact us for professional advice.



#### **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 mini 8K S	6	20	3	4+4	60+120	180+60
Elegoo saturn 4 Ultra	3.5	20	3	Default standard parameters of the device		
Elegoo saturn 3 Ultra	4.5	20	3	4+4	60+180	180+90
Creality HALOT-MAGE S	2	10	3	8+2	60+180	240+120
Anycubic Photon Mono 4 Ultra	4.5	25	3	4+4	90+120	240+90
Anycubic Photon Mono M7 Pro	3.5	20	3	4+4	60+120	180+60

Note: The list's brands are solely owned by the respective brand owners. Here is only description provided

## **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.
- 3.3D resin is not approved for use with food, drink, or medical application on the human body
- 4. For additional information please see the Material Safety Data Sheet.

### **Safety Precautions**

Please store in a cool place below 25°C(77°F), away from direct sunlight. Ordinary visible light may cause the resin to polymerize and gel.



3D Printing Product **Manufacturer** Equipment Automation **Supplier** Your 3D Printing technology **Partner** 

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