

## RF-YY-10 Resin

RF-YY-10 Dental grade resin material suitable for 3D printing flexible simulated gums. In digital oral healthcare, by combining dental model materials, functional 3D reconstruction of gingival model fragments with functional defects can be achieved. The material has superior elasticity, tear resistance, and good molding stability, and will not shrink or age. Even if stored for a long time, its flexibility can be guaranteed. The simulated gingival material does not produce any irritating odor.



### MATERIAL STATUS

Applications	Dental model
Appearance	Red color
Form	Resin
Processing method	(surface exposure molding)LCD (surface exposure molding)DLP
Characteristics	High strength、 Good hardness Easy to polish、 High elasticity High precision

PHYSICAL PROPERTIES	Testing method	Typical value	
Density	ASTM D792	1.10-1.16	g/cm <sup>3</sup>
Viscosity	ASTM D445	2000-3000	mPa • s
Hardness	ASTM D2240	40A	ShoreA

### MECHANICAL PROPERTIES

Tensile Strength	ASTM D638	31.4	MPa
Elongation at Break	ASTM D638	172	%

\*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

## PRINT PARAMETERS

Representative Machine	Exposure Time/s	Bottom Exposure Time/s	Bottom Layer Count	Lift Distance/mm	Lift Speed /mm • min <sup>-1</sup>	Retract Speed /mm • min <sup>-1</sup>
phrozen sonic mini8K S	6	10	3	10	120	120
Elegoo saturn 4 Ultra	6	20	3	Default standard parameters of the device		
Elegoo saturn 3 Ultra	7	25	3	4+4	60+180	180+60
Crealty Halot-MAGE Pro	6	20	3	8	120+180	180+120
Anycubic Mono 4 Ultra	4. 7	35	3	4+4	90+120	180+120

## \*Post-Processing Procedure and Note

- 1.The print model should be cleaned with absolute ethanol/isoprpanol and can be cleaned with a low-frequency ultrasonic cleaner. If high-frequency and high-power ultrasonic cleaning is used for the model, it may cause certain damage to the surface 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 degrees Celsius, away from direct sunlight. Ordinary visible light may cause the resin to polymerize and gel.