RF-HS-12 Hard Splint Resin

Hard Splint Resin is a biocompatible material used for producing bite plates,occlusal splints, and retainers.It can make products with high accuracy and dimensional stability. It also has high abrasion resistance,high flexural strength,and high impact strength.These material features make the printed products easy to clean.



MATERIAL STATUS	
Applications	Hard occlusal splints, bite plates, and retainers
Appearance	Semi-clear
Form	Resin
Processing method	(surface exposure molding)LCD (surface exposure molding)DLP
Characteristics	High precision、High toughness、Easy to clean High wear resistance、Biocompatibility

PHYSICAL PROPERTIES	Testing method	Typical value
Density	ASTM D792	1.05-1.10 g/cm³
Viscosity	ASTM D445	600-700 mPa•s
Hardness	ASTM D2240	85-90D ShoreD
MECHANICAL PROPERTIES.		
Tensile Strength	ASTM D638	80-90 MPa
Elongation at Break	ASTM D638	8-10 %
Flexural Strength	ASTM D790	85-95 MPa
Flexural Modulus	ASTM D790	2200-2500 MPa

*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	10	40	3	4+3	60+120	180+60
Creality Halot-MAGE Pro	3.5	20	3	8+2	60+180	240+120
Elegoo saturn 4 Ultra	6	30	3	Default standard parameters of the device		
Anycubic Mono 4 Ultra	7.5	40	3	4+4	90+120	240+90
Elegoo saturn 3 Ultra	7.5	40	3	4+4	60+180	180+90
Anycubic M7 Pro	5.5	30	3	4+4	60+120	180+60

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

*Safety Precautions

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

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