

# **High Transparency Resin**

# 高透树脂

## \*Product introduction 产品介绍

High transparency resin is a high-precision 3D printing UV curable resin with high transparency and low yellowing. This resin has the properties of low shrinkage / high penetration / low yellowing. Suit for customized proofing and small batch production of headphones shell, lighting and high transparency samples. 高透树脂是一款高透明、低黄变的高精度 3D 打印光敏树脂,该树脂具有低收缩、高透明度、低黄变等性能,适合用于耳机机壳、灯饰、高透明度样板制作与小批量生产。

## \*Resin property 树脂特性:

Pre-cure 固化前(液态):

Measurement	Test method	Value	
测试项目	测试方法	测试数值	
Viscosity 粘度, cps (@25℃)	ASTM D 2196	500	
Density 密度, g/cm³ (@25℃)	ASTM D 792	1.05-1.10	

#### Post-cure 固化后(固态)

Measurement 测试项目	Test method 测试方法	Value 测试数值
Hardness 硬度, Shore D	ASTM D 2240	80-85
Flexural modulus 弯曲模量, Mpa	ASTM D 790	1500-2000
Flexural strength 弯曲强度, Mpa	ASTM D 790	80100
Tensile modulus 拉伸模量, Mpa	ASTM D 638	600-1000
Tensile strength 拉伸强度, Mpa	ASTM D 638	40-65
Elongation at break 断裂延长率,%	ASTM D 638	10-18
Impact strength,notched lzod, J/m 缺口冲击强度	ASTM D 256	40-50
Heat deflection temperature, ℃ 热变形温度	ASTM D648 @66PSI	60-80

### \*Parameter suggestion 参数建议:

Equipment 设备名称	Thickness 层厚	Base layer exposure 首层曝光时间	Normal layer exposure 一般层曝光时间	Lift speed 电机速度
DJ-89	0.05-0.1 mm	30-50 s	3.0-4.5 s	1-8 mm/s
DJ-89Plus	0.05-0.1 mm	30-50 s	3.0-4.5 s	1-10 mm/s
Halot One	0.05-0.1 mm	20-40 s	4.0-5.5 s	1-3 mm/s
Halot Sky	0.05-0.1 mm	30-50 s	3.0-4.5 s	1-8 mm/s



Halot Mage	0.05-0.1 mm	30-50 s	2.5-3.5 s	1-3 mm/s
Photon Mono M5s	0.05-0.1 mm	30-50 s	3.0-4.5 s	1-10 mm/s
Saturn 3 Ultra	0.05-0.1 mm	30-50 s	3.0-4.5 s	1-10 mm/s

#### \*Post-Processing Procedure and Note 后处理与清洗:

- 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;将模型利用无水乙醇或异丙醇超声波震荡机清洗,切勿以高频震荡或用力刷洗模型以免模型表面细节遭受破坏。
- 2. Thoroughly blow the model dry with a hair dryer or the like; 用气枪或吹风机移除表面清洗液。
- 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; 后固化前先移除大部分支撑, 待后固化完成后进行细节支撑移除与表面修饰处理。
- 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. 根据选用的后固化调整对应的后固化时间。

### \*Safety Precautions 安全注意事项:

- 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. 如眼睛不慎接触到树脂,请立即用清水清洗,清洗后如仍感觉不适请立即就医。
- 2)Skin Contact: Remove contaminated clothing and rinse contact area thoroughly with soap and water. 如不甚接触到衣物请立即更换以肥皂与清水立即清洗皮肤与衣物。
- 3)3D resin is not approved for use with food, drink, or medical application on the human body. 请 勿将树脂与食品接触。
- 4)For additional information please see the Material Safety Data Sheet. 详情请参考物质安全数据表。

#### \*Storage 储存方式:

Below 25  $^{\circ}$ C cold storage for 18 months, sensitive to visible light, general illumination visible light will initiate polymerization reaction. 树脂在 25  $^{\circ}$ C条件下避光储存保质期 18 个月,对可见光敏感,容易引发聚合反应。