

## Standard Resin

### 刚性树脂

#### \*Product introduction 产品介绍

Standard resin is a high adaptation UV curable resin for 3D printing suitable for mono/color screen. It has fast printing speed, low shrinkage, high precision, high hardness and a certain toughness. Suitable for mass-produced products such as garage kid, teaching, toy design, handicraft design, industrial parts design, etc.通用刚性树脂是一款高适配型 3D 打印树脂可适配黑白屏与彩屏市场上的主流机型，此树脂打印速度快、收缩低、精度高、硬度高，同时兼具一定的韧性。该树脂适合应用于手办、教学、玩具设计、工艺品设计、工业零件设计等。

#### \*Resin property 树脂特性:

Pre-cure 固化前(液态):

Measurement 测试项目	Test method 测试方法	Value 测试数值
Viscosity 粘度, cps (@25°C)	ASTM D 2196	180-350
Density 密度, g/cm <sup>3</sup> (@25°C)	ASTM D 792	1.10-1.20

Post-cure 固化后(固态)

Measurement 测试项目	Test method 测试方法	Value 数值
Hardness 硬度, Shore D	ASTM D 2240	80-85
Flexural modulus 弯曲模量, Mpa	ASTM D 790	2000-2500
Flexural strength 弯曲强度, Mpa	ASTM D 790	70-100
Tensile modulus 拉伸模量, Mpa	ASTM D 638	550-950
Tensile strength 拉伸强度, Mpa	ASTM D 638	35-60
Elongation at break 断裂伸长率, %	ASTM D 638	8-12
Impact strength, notched Izod, J/m 缺口冲击强度	ASTM D 256	25-35
Heat deflection temperature, °C 热变形温度	ASTM D648 @66PSI	70-75

#### \*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	30-60 s	2.0-3.0 s	1-8 mm/s
DJ-89Plus	0.05-0.1 mm	30-60 s	2.0-3.0 s	1-10 mm/s
Halot One	0.05-0.1 mm	20-40 s	2.5-4.0 s	1-3 mm/s
Halot Sky	0.05-0.1 mm	30-60 s	2.0-3.0 s	1-8 mm/s

Halot Mage	0.05-0.1 mm	30-60 s	1.5-2.5 s	1-3 mm/s
Halot Mage Pro	0.05-0.1 mm	30-60 s	1.0-1.5 s	1-50 mm/s
Phrozen MINI 8K	0.05-0.1 mm	30-60 s	2.5-3.5 s	1-3 mm/s
Photon Mono M5s	0.05-0.1 mm	30-60 s	2.0-3.0 s	1-10 mm/s
Saturn 3 Ultra	0.05-0.1 mm	30-60 s	2.0-3.0 s	1-10 mm/s
NOVA Whale	0.05-0.1 mm	40-60 s	5.5-6.5 s	1-3 mm/s

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

1. The print model should be cleaned with absolute ethanol/isopropanol 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. 如不慎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 °C cold storage for 18 months, sensitive to visible light, general illumination visible light will initiate polymerization reaction. 树脂在 25 °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。