

Water Washable Model Resin

水洗牙模树脂

*Product Introduction 产品介绍

Water washable model resin is a skin irritation and low skin allergenic UV curable resin for 3D printing. It can be washed with water without the use of organic solvents. It has the characteristics of low shrinkage, high hardness, temperature resistance. Suitable for dental restoration, invisible correction thermoforming and other applications. 水洗牙模树脂是一款低刺激性、低致敏性的光固化 3D 打印树脂，可用水清洗而无需使用有机溶剂，其具有低收缩、高硬度、耐高温等特性，适用于齿科修复、隐形矫正热压成型等牙科医疗领域。

*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	450-550
Density 密度, g/cm ³ (@25°C)	ASTM D 792	1.05-1.15

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	85-90
Flexural modulus 弯曲模量, Mpa	ASTM D 790	1000-1500
Flexural strength 弯曲强度, Mpa	ASTM D 790	60-75
Tensile modulus 拉伸模量, Mpa	ASTM D 638	600-1000
Tensile strength 拉伸强度, Mpa	ASTM D 638	40-55
Elongation at break 断裂延长率, %	ASTM D 638	10-15
Impact strength, notched Izod, J/m 缺口冲击强度	ASTM D 256	35-45
Heat deflection temperature, °C 热变形温度	ASTM D648 @66PSI	75-80

*Parameter Suggestion 参数建议:

Equipment 设备名称	Layer Height 层厚 (mm)	Bottom Exposure Time 底层曝光时间 (s)	Bottom Layer Count 底层数 (layers)	Exposure Time 一般层曝光时间 (s)	Lifting Distance 抬升高度 (mm)	Light-off Delay 灭灯延时 (s)	Lift speed 电机速度 (mm/min)
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Piocreat DJ-68	0.05	20-60	3-5	2.6	5	1-2	60-300
Piocreat DJ-89Plus	0.05	20-60	3-5	2.7	8-10	1-2	60-300
Piocreat D158	0.05	10-40	2-3	1.6	5-7	1-2	60-300

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

1. Soak the model in water, then use a brush to scrub it several times until there is no resin residue on the surface, or it can be cleaned with a low-frequency ultrasonic cleaner. 将模型泡入水中, 再使用毛刷多次刷洗, 或者用低频超声波清洗机清洗, 直到表面无树脂残留。
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. Post-curing time is 2-10 minutes, and the corresponding post-curing time should be adjusted according to different post-curing equipment. The printed parts should be kept in a cool dry place. 后固化时间 2-10 分钟, 根据不同的后固化设备调整对应的后固化时间。打印件应存放在阴凉干燥处。

***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. Do not discharge cleaning water directly into the environmental system. 请勿将清洗后的水直接排入环境系统中。
5. For additional information please see the Material Safety Data Sheet. 详情请参考物质安全数据表。

***Storage and Use 储存与使用:**

1. Below 25 °C cold storage for 18 months, sensitive to visible light, general illumination visible light will initiate polymerization reaction. 树脂应在 25 °C 条件下避光储存, 对可见光敏感, 容易引发聚合反应, 保质期 18 个月。
2. It is recommended to shake well before using and print at a temperature of 18-35°C. 建议使用前摇匀树脂, 在环境温度 18-35°C 下进行打印。