

Specifically designed for jewelry casting

iFUN resin provides a one-stop solution for jewelry manufacturing, with its unique low shrinkage formula ensuring excellent direct casting results. This allows jewelry designers to achieve more precise and high-quality works.

3D printing jewelry casting resin

Colours: green

- Extremely low shrinkage less than 0.25%
- No stacking, no adhesion
- Fine detail restoration
- Casting with low thermal expansion
- Simple post-processing
- Suitable for casting gold, silver, diamonds



content	Data value	testing method
color	green	
viscosity	280cps(25°C)	ASTM D1084-1997
density	1.05~1.1g/cm ³	ASM D1875-69(1980)
shrinkage	< 0.25%	Capillary method
hardness	40D	ASTM D2240-05(2010)



Gypsum powder recommendation

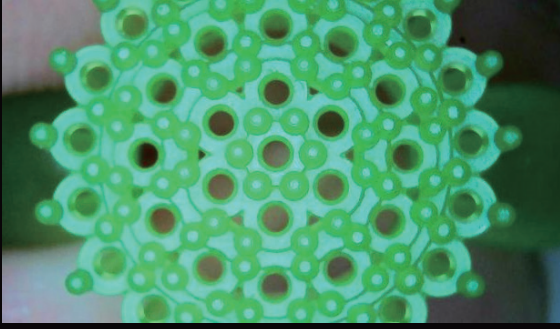
(choose high strength gypsum powder can achieve better casting effect.)



<Prestige OPTIMA™>

Recommend:

- 1.Prestige OPTIMA : <https://www.certus-int.com/optima>
- 2.Gilcast HS SOFT : <https://www.srl dental.com>
- 3.GRS : <https://www.goodwin.co.uk/>
- 4.TT resin powder (TECAST RESINCAST)

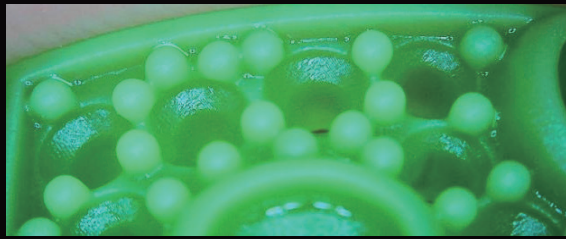
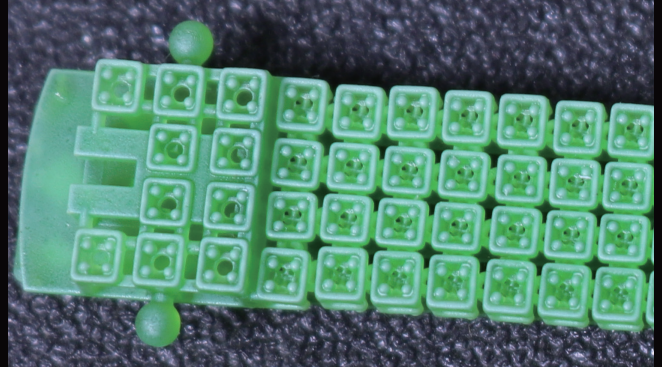


Extremely Low Shrinkage

The shrinkage rate of 700D is exceptionally low, with an absolute dimensional error within the range of 0.01-0.03 when used with compatible printers, and a shrinkage rate not exceeding 0.25%. This ensures dimensional accuracy of castings, with most tolerances within reasonable ranges, enhancing both designer efficiency and work quality.

No Piling, No Adhesion

It excels in areas with special structures, such as side holes and fine clearances (0.2mm), avoiding piling and adhesion issues, thereby preserving the integrity and precision of castings.



Fine Detail Reproduction

IFUN resin can clearly depict the clasps in diamond settings, with high fidelity in concave-convex shapes, clear organization of filament structures, and sharp angles. It also achieves high fidelity in reproducing specific details, meeting the meticulous design requirements.

Convenient Post-processing

Post-processing is simple and time-saving, significantly enhancing production efficiency and reducing the time and manpower required for subsequent processing steps.



Easy Casting

With a high wax content, 700D has a low thermal expansion rate, ensuring a stable casting process that is easy to control, thus improving production efficiency and reducing production costs.

Suitable for various types of jewelry:

1. Rings and diamond settings with a wall thickness of approximately 0.5mm or more.
2. Bracelets with a focus on surface detail and a wall thickness of 0.5mm or more.
3. Chains, pendants, filigree, and similar items with clearances exceeding 0.5mm.

IFUN resin provides jewelry designers with increased creative possibilities and flexibility, catering to diverse design needs.

Precautions:

1. All ingredients of the resin need to be stirred before printing.
2. The gap at the bridge position should be above 0.5mm, and the support position should not be too wide.
3. Long models with small gaps will easily warp and stick after curing after cleaning.

How To Cast

—. Post-processing process

(Strictly follow each process to operate, do not skip or omit!)

95% ALCOHOL (FIRST RINSE)	95% ALCOHOL SOAK (CLEAN AGAIN)	ULTRASONIC CLEANING (95% ALCOHOL)	DRY	UV CURING (800W)
30s	1min	2min	—	5min

1. Clean the residual resin on the model surface for about 30 seconds
2. Clean the model with clean alcohol for about 1 minute
3. Ultrasonic cleaning for 2 minutes
4. Take out the model and blow dry the alcohol on the model
5. Post-cure for 5 minutes

Remark:

1. *The surface must be thoroughly clean and dry before entering the casting process, which is critical and will affect the casting effect.
2. *Please use resin powder for casting (**important**), it is recommended to use: Prestige OPTIMA or Gilcast HS SOFT

二.Casting aspects

INSTRUCTIONS FOR MIXING

Powder: Water Ratio (38% - 40%)	Powder (Kg.)	Water (cc.)	Powder (Lb.)	Water (cc.)
Automatic Vac. Mixing	1	380	1	172
Conventional Mixing	1	400	1	181.6
Water Temperature °C	21-24	21-24	21-24	21-24

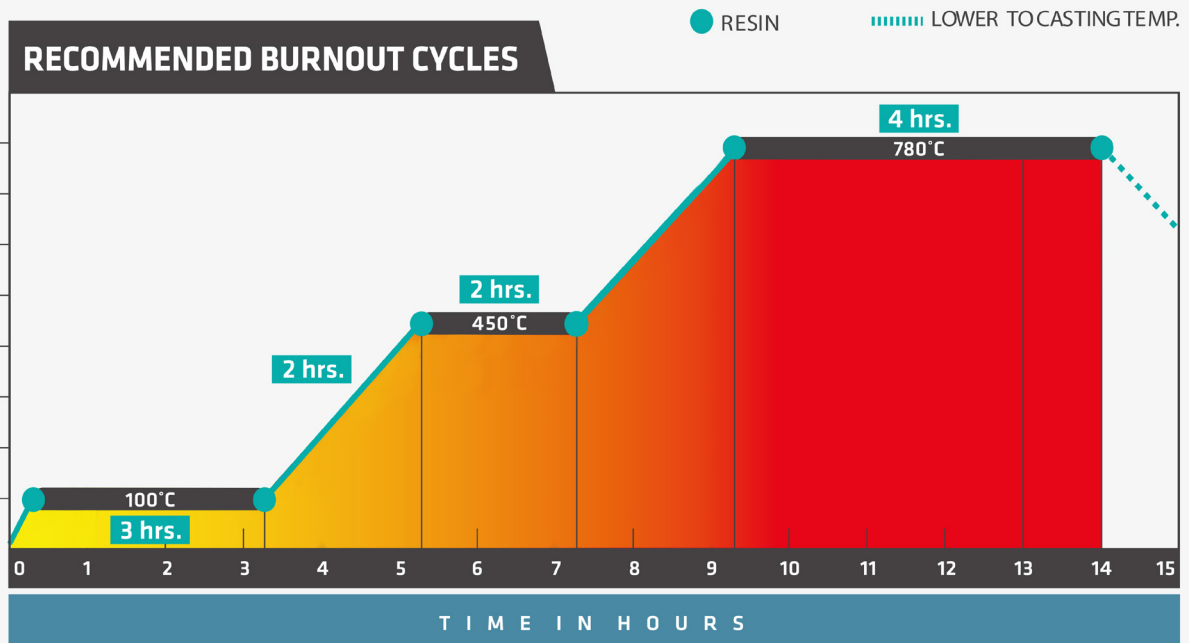
- Increasing the powder amount 1% will decrease the total working time for approximately 30 seconds.

Automatic Vac. Mixing Mach.	Minutes
Accurately Weigh Powder / Water	-----
Add Powder to Water	-----
Mixing & Vacuuming	5
Pour into Flask	2
Vacuum Invested Flask	1
Total Working Time	8

- Allow to sit undistributed for 90-120 minutes before burnout

Conventional Mixing Mach.	Minutes
Accurately Weigh Powder Water	-----
Add Powder to Water & Mix	4
Vacuum the Bowl	1
Pour into Flask	1
Vacuum Invested Flask	2
Total Working Time	8

- Allow to sit undistributed for 90-120 minutes before burnout



- Flip flask upwards while ramping down to casting temperature.
- Please contact the manufacturer for other recommended burnout cycles

Remarks:

It is recommended to use centrifugal casting machine when casting, which can make the molten metal flow to every place of the model, so that the success rate of casting is greatly improved.

The temperature of molten liquid during casting is controlled in the range of 1000°C, If the temperature of molten metal is too high, the inner wall of plaster mold will be broken and the casting effect will be affected.



Read more >>
<http://ifun3d.com/>