

UTR-Therm 1 photosensitive resin can withstand temperature up to 130°C, which can simulate the thermal performance of engineering plastics. It is heat-resistant and moisture-resistant, and has high hardness. It can be used in scenes with high temperature resistance requirements such as vacuum plating, water plating, baking paint, and rapid molds.



## ■ ■ Advantages

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Temperature resistance can reach 110-130°C, excellent dimensional stability, high resolution detail performance, high strength and firmness.

## ■ ■ Disadvantages

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Average toughness.

## ■ ■ Accuracy

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100mm  $\pm$ 0.1mm

## ■ ■ Recommended reasons

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Heat and humidity resistance, suitable for demanding applications, stable production period, high hardness, heat and humidity resistance combined with excellent dimensional stability; this material can simulate the thermal properties of engineering plastics and is used for testing such as pipes and faucets. Ideal for applications such as medium hot air flow or hot water flow.





## ■ ■ Note

This material rarely lacks in toughness. If you have more requirements for bending, please consult our sales rep for other high toughness materials.

| Material parameters   |         |
|---|---------|
| Heat distortion temperature<br>(HDT@0.455 MPa) (ASTM Method D648) | 101.9℃  |
| Heat distortion temperature<br>(HDT@1.82 MPa) (ASTM Method D648)  | 85.5℃   |
| Shore hardness (ASTM Method D2240)                                | 83D     |
| Tensile strength (ASTM Method D638)                               | 47.2MPa |
| Tensile modulus (ASTM Method D638)                                | 3235MPa |
| Elongation at break (ASTM Method D638)                            | 1.5%    |
| Flexural strength (ASTM Method D790)                              | 96.9MPa |
| Flexural modulus (ASTM Method D790)                               | 3165MPa |

| Application areas  |
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| • Electronic appliance assembly and special function test. |
| • Jigs and fixtures for production.                        |
| • Sculptures and art display products.                     |
| • Automobile assembly and modification parts.              |