



Shenzhen Yongchanghe Technology CO., Ltd.

## Technical Data Sheet

### Product detail

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Product name: ABS like Resin (engineering like resin)

Model number: Gk E series

Applicable industrial: Toys, carton figures, education, dental, jewelry, industrial modeling etc.

Manufacturer: Shenzhen Yongchanghe Technology CO., LTD.

Add: 1F, A3 blg, Zhimei Park, Fuhai Av. Fuyong, Bao'an District, Shenzhen, China 518103

### Product advantage

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Non brittle

Anti-scratch, great weathering

Super strong with tenacity

Suitable for different post processing like drilling, tapping, assembling etc.

Non VOC, RoHS, Reach, En71-3 certificated

Compatible for most 3D printer

### Technical specification

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Flexural modulus: 979.24 Mpa $\pm 10\%$	Elongation at break: 35.44% $\pm 10\%$
Flexural strength : 44.15 MPa $\pm 10\%$	Hardness(Shore D): 80-88 D
Tensile strength: 38.36MPa $\pm 10\%$	Density: 1.05—1.25 g/cm <sup>3</sup>
Tensile modulus: 447.12MPa $\pm 10\%$ Mpa	Notched impact strength: 454.37j/m $\pm 10\%$
maximum pulling strength: 1595N $\pm 10\%$	Viscosity: 350-650 MPa·s
Yield point elongation: 7.22% $\pm 10\%$	

Testing room temperature: 23°C  $\pm 2^\circ\text{C}$  Testing room humidity : 50%RH  $\pm 5\%$ RH

Testing standard of test strip: ASTM

Post curing: test strip in water for 1 mins post curing with 200mw/cm<sup>2</sup> 405nm.

## **Printing parameter**

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GK series are perfectly on most brand LCD printer, and fast printing on DLPs.

For LCD printer with RGB screen:

e.g. elegoo mars or photo s base 50s, each layer 8s, layer height 50 micron.

For LCD printer with monochrome screen:

e.g. satori base 50s, each layer 3s, layer height 50 micron.

For DLP printer with projector:

Bottom 15s and each layer 1-5s.

e.g. hunter base 15s, each layer 4s, layer height 50 micron.

The exposure time should be adjusted according to printer light energy, layer height and model structure.

## **Cleaning and post-curing**

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Step1, Spray with Isopropanol, then blow resin away with cool wind.

Step2, Prepare two containers with Isopropanol (alcohol > 95%), and place the jobs into the first container and slightly shake it, then soak in the second container for about 1 minute (dental resin should not exceed 30 seconds).

Step3, Flush with water before dry it, do make it sure it 's 100% dried as residuary alcohol may cause white spot or crack on jobs.

## **Post-curing**

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1. The curing time is proportional to the volume of the work piece and inversely proportional to the optical power of the curing chamber. Example: 100 watt LED curing box, jewelry jobs is recommended to be cured with soaking in water for 20-30 minutes.

2. The post-cure time of dental casting resin, dental non-casting resin and jewelry mold resin shall not more than 5 minutes.

3. Work-pieces should be in the water during post-curing to prevent deformation especially for dental and jewelry.

4. Don't forget to use cool air to dry it after post-curing.

## **Warning**

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1. This material should not be in contact with eyes, skin or clothing, and should not be tasted or eaten.

2. If you accidentally touch your eyes or skin, immediately rinse with water for about 20 minutes and seek medical advice if necessary.
3. Please pay attention to air circulation and take protective measures when using. Wash thoroughly after handling.
4. The product is in a liquid state with a slight odor. Wear a mask and gloves.
5. The product should be stored in a sealed container. After use, it should be filtered and keep back in bottle on time and placed in a dry and well ventilated place. It should not be exposed to sunlight.
6. Shake well before use, and leave it for 30 minutes to eliminate air bubbles that generated during the shaking process.
7. The ambient temperature is recommended to be controlled at 25-30 degrees Celsius, and during the printing should avoid any lights.
8. Dispose of waste in accordance with local environmental regulations.
9. Storage environment: Store in cool and dry place, and avoid sunlight, recommended temperature at 25-30 degrees Celsius.