

## MOLEGRID™ GK One

A tough, scratch-resistant, and wear-resistant resin specially designed for figurine modeling.

### Description:

MOLEGRID™ GK One resin is a tough and wear-resistant light-curing resin. It utilizes a unique molecular surface treatment method, allowing the resin to exhibit excellent scratch resistance and wear resistance after molding. It is widely used in printing assembled structural components. Its toughness makes it effective in bending resistance, drilling, tapping, and other processes, especially in secondary processing. It is compatible with various 3D printing equipment operating in the 405nm wavelength range.

Resin color : white, gray, white skin, pink skin, pale skin, black and skin.

MOLEGRID™ GK One is suitable for scenarios with high demands for strength and toughness. Its additional wear resistance extends the resin's application range to the industrial field, such as fixtures, jigs, fasteners, connectors, etc.

### Characteristics:

- Tough, impact-resistant
- Scratch-resistant, wear-resistant

### Recommended applications:

- Fragile components
- Articulated joints
- Wear-resistant parts

| Liquid properties     |   |                           |                                    |
|-----------------------|---|---------------------------|------------------------------------|
| Appearance            | Opaque  | Density                   | 1. 10–1. 20g/cm <sup>3</sup> @25°C |
| Resin Viscosity       | 300–400cps @25°C                              |                           |                                    |
| Mechanical properties |   | Post cured <sup>1</sup>   |                                    |
| ASTM Method           | Properties Item                               | Metric Units <sup>2</sup> | Imperial Units <sup>2</sup>        |
| D638                  | Tensile strength                              | 46MPa                     | 6. 7ksi                            |
| D638                  | Tensile modulus                               | 2141. 0MPa                | 310. 0ksi                          |
| D638                  | Elongation at break                           | 21. 3%                    |                                    |
| D790                  | Flexural strength                             | 71MPa                     | 10. 3ksi                           |
| D790                  | Flexural modulus                              | 1902MPa                   | 276. 0ksi                          |
| D256                  | Impact value                                  | 61J/m                     | 1. 12ft-lb/in                      |
| D2240                 | Hardness (shore D)                            | 80D                       |                                    |
| Thermal properties    |   |                           |                                    |
| D648                  | Heat deflection temperature @0. 45MPa (66psi) | 54. 7°C                   | 130. 46°F                          |

<sup>1</sup>: The data was measured after post-curing for 20 minutes in a UV curing chamber with a light intensity energy density of 10 mW/cm<sup>2</sup>.

<sup>2</sup>: The material properties may vary depending on the structure of the printed part, printing orientation, printing equipment, printing parameters, and post-curing process.