



Tough Resin

Photoreactive Resin for Dazz 3D S130 Printer

Technical Data Sheet

www.dazz-3d.com

Tel: +86-0755-33372859

Email: dazz@dazz-3d.com

Dazzle Laser Forming Technology Co., Ltd

K-2F, Junxiangda Building A, No.9 Zhongshanyuan Rd., Nanshan Dist., Shenzhen, Guangdong, China -818052

Dazz 3D patented material carries high tensile strength, high elongation, and elastic properties, making it preferable to other resin-based materials currently on the market. Combination of patented resin and high accuracy 3D printer produce superior result with fine detail and smooth surface.

1.Applications

Jewelry, Dental, Architecture, Manufacturing, Education, Art & Entertainment

2.Technical Data

1)Physical Properties of Liquid Resin

| Item | 8003W |
|--|---------------------|
| Appearance | White Liquid |
| Density (25°C) | 1.08±0.02 |
| Viscosity (25°C, cps,NDJ-8S) | 450±50cps |
| Critical Exposure (mj/ cm ²) | 6.5 |
| Cured Thickness Rang (mm) | 1.08-0.02 |
| Recommend Thickness (mm) | 0.05-0.1 |

2)Properties of Cured Resin

| Item | Method | Numerical Value (Secondary Cure) |
|--------------------------------|-------------|----------------------------------|
| Shore Hardness (D) | ASTM D 2240 | 80-85 |
| Tensile Strength (MPa) | ASTM D 638 | 58 |
| Elongation at break(%) | ASTM D 638 | 10 |
| Elastic modulus (MPa) | ASTM D 638 | 2500 |
| Heat Distortion Temp. @ 66 psi | ASTM D 648 | 55°C |

3)Advice of Secondary Cure

Printed objects are suggested to be secondary cured to increase the hardness. Cure time for reference as below:

| UV Power | Correspond Distance | Intensity (100mW/cm ²) | Cure Time (mins) |
|---------------------------------|---------------------|------------------------------------|------------------|
| 2000W High-voltage Mercury Lamp | 15-20CM | 100 | 2-3 |
| 300W High-voltage Mercury Lamp | 10CM | 6 | 5-15 |
| 125W High-voltage Mercury Lamp | 10CM | 3 | 10-20 |
| 40W LED Tube | 10 | <1 | 15-30 |

3.User Guide

1)To reduce the risk of pigment settling, resin containers should be gently shake before using.

2)The remaining liquid resin in the tank can be used for your next print, but should not be returned to the original bottle or cartridge to avoid potential contamination. Keep unused resin in the resin tank. The orange acrylic of the tank and printer cover will protect your unused resin from ambient light.

4.Safety Precautions

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.

2)Skin Contact: Remove contaminated clothing and rinse contact area thoroughly with soap and water.

3)Dazz 3D resin is not approved for use with food, drink, or medical application on the human body.

4)For additional information please see the Material Safety Data Sheet.

5.Packing Specification: 1kg/bottle

6.Storage

Store resin in a cool, dry place out of direct sunlight. Keep containers closed. Shelf-life is 6 months from receipt at 50–82 °F (10–28 °C). For optimal printing, do not exceed this range in storage.