

# **Standard 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

ltem	150W	150R	150B
Appearance	White Liquid	Red Liquid	Black Liquid
Density (25°C)	1.10±0.03	1.10±0.03	1.10±0.03
Viscosity (25°C, cps,NDJ-8S)	780±50cps	780±50cps	780±50cps
Critical Exposure (mj/ cm <sup>2</sup> )	9	8.5	9.5
Cured Thickness Rang (mm)	0.025-0.10	0.025-0.10	0.025-0.10
Recommend Thickness (mm)	0.1	0.1	0.05

#### 2)Properties of Cured Resin

Item	Method	Numerical Value (Secondary Cure)
Shore Hardness (D)	ASTM D 2240	55
Tensile Strength (MPa)	ASTM D 638	27
Elongation at break(%)	ASTM D 638	5
Elastic modulus (MPa)	ASTM D 638	1360
Heat Distortion Temp. @ 66 psi	ASTM D 648	45

#### 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/cm²)	Cure Time (mins)
2000W High-voltage	15-20CM	100	2-3
Mercury Lamp 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.