# MAGIFLEX

## User Manual for Performance Plus Engineering Resin

MagiFlex MSER800 Performance Plus Engineering Resin is an omnipotent photopolymer resin material for engineering level 3D printing. It gathers almost all advantages of all-catagory resins including high toughness, low shrinkage, light odor, high hardness, high-temperature resistance and weather resistance. MagiFlex MSER800 Performance Plus Engineer Resin can be applied to print figure models, industrial molds, industrial high-temperature-resistant fixures, dental models, functional parts and engineering fields which need high toughness and ultra high reliabilty.

## **Parameters:**

Model Name	MSER800
Density	1.16g/cm <sup>3</sup>
Viscosity(25°C) (cps)	600-750
Flexure Strength	51.2Mpa
Hardness	88D
Tensile Strength	72.6MPg
Elongation at Break	10.3
UV Wavelength	365-405nm
Curing Time	1.5-3s
Molding Shrinkage	2.1-2.5%
Resin Wash	Alcohol
Shelf Life	18 Months
Color Options	White, Clear, Grey, Black

<sup>\*\*</sup>Colors can be customized

#### Precautions:

- 1. Seal and store the resin at room temperature of  $25\sim35^{\circ}$ C, keep away from high temperature or sunlight exposure.
- 2. Suggested temperature environment for resin usage is  $20\sim35^{\circ}$ C. If the temperature is too low, it may affect the printing. It is recommended to pre-heat the resin appropriately before use(not exceeding  $80^{\circ}$ C)
- 3. Shake the resin bottle for about 2 minutes until the resin is well mixed before each print.
- 4. It is recommended to control the alcohol cleaning time within 10 minutes, otherwise it may cause the printing model to crack, deform or become soft. It is recommended to control the post-curing time within 10 minutes, otherwise it may cause the model to age, crack or become brittle.
- 5. If printing large models or solid models, please add bottom valve printing or vacuum model printing in slicing software, to minimize the probability of madel warping.
- 6. If the resin has not been used in printer for more than 2 days, it is recommended to filter the resin with a filter funnel after stirring evenly in the liquid tank, then pour it back to the resin container.
- 7. This product should not be taken orally, keep away from children and never touch it with eyes. In Case of accidental contact, rinse with plenty of water as soon as possoble. If there is any discomfort, seek for medical treatment immediately.

### Notes:

Before Use:

Shake the resin to uniform state.

Clean the resin tank and the molding platform to keep the tank bottom in light transmission.

When using:

Unscrew the cap and add it to the resin tank according to the equipment requirements.

Setting the 3D printer into correct print parameters for printing.

### After use:

After printing, please use matching tools for post-processing, including shovels, diagonal pliers, tweezers, container gloves; Ethanol, lactic acid or isopropanol cleaning liquid.

## Post-processing Steps:

Remove the printed model from the platform with a blade.

Wash the printed model ultrasonically and with alcohol for 3-5 minutes, then get it drained.

\*\*For more support or service please contact support@magiflex.net