# MAGIFLEX

# User Manual for Ultra High Temperature Resistant Engineering Resin

MagiFlex MSER820 Ultra High-Temperature-Resistant Resin is a photopolymer resin material for engineering & industrial grade 3D printing. It is fomulated with ultra high temperature resistance ability up to 250°C, meanwhile has the advantages of high strength, low shrinkage, light odor and weather resistance. MagiFlex MSER800 Ultra High-Temperature-Resistant Resin can be applied to engineering molds, industrial high-temperature-resistant fixures, pressure film tool, precision devices and other engineering tools which need high temperature resistance and ultra high reliabilty.

## Parameters:

Model Name	MSER820
Density	1.15g/cm³
Viscosity(25℃) (cps)	620-760
Flexure Strength	50.6Mpa
Hardness	85D
Tensile Strength	71.2MPg
Elongation at Break	11.2
UV Wavelength	365-405nm
Curing Time	1.5-3s
Molding Shrinkage	1.8-2.3%
Resin Wash	Alcohol
Shelf Life	18 Months
Color Options	Grey, Clear, Red Wax, 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