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Welcome , new user of MAYER MAKES Engineering Resin, a high-performance 3D printing material designed for industrial and professional applications.
This user guide will provide you with all the information you need to get started with your new resin and ensure that you get the most out of your 3D printing experience.

Getting Started:

1. Safety Precautions: Before you start, it is important to make sure you are familiar with the safety precautions that come with handling and using engineering resin. Always work in a well-ventilated area and wear gloves to protect your skin. Avoid contact with eyes and skin, and keep the resin away from food and drink.
2. Resin Storage: Store the resin in a cool, dark place to prolong its shelf life. Avoid exposing the resin to direct sunlight or high temperatures.
3. Resin Compatibility: Make sure that your 3D printer is compatible with the MAYER MAKES Engineering Resin. Consult the manufacturer's specifications to confirm that your machine can handle the viscosity and curing requirements of the resin. Most commonly available Resin 3d printers are compatible. If you are unsure check out our documentation or reach out to our customer service.

Using the Resin:

1. Preparation: Before using the resin, stir it thoroughly to ensure that it is homogeneous. I f you are shaking the bottle, air bubbles can be introduced and willt take a bit of time to rise to the top in the vat, therefore stirring is the prefered method.
2. Filling the Resin Tank: Fill the resin tank of your 3D printer with the correct amount of resin, as specified by the manufacturer. Make sure to fill the tank slowly and steadily to avoid introducing air bubbles into the resin.
3. Printing: Start your 3D print as you normally would, following the instructions of your 3D printer. The curing time for MAYER MAKES Engineering Resin may be longer than for other resins, so be sure to check the manufacturer's specifications for the correct curing time.
   You can find ready made profiles for alot of popular 3D printers on our Github repository.
   I f your particular printer is not listed, starting with the settings of asimilar machine is advised. Usually only small adjustments in curing time are needed.

Post-Printing:

1. Cleaning: Once the print has finished, remove it from the build platform and rinse it thoroughly with isopropyl alcohol to remove any uncured resin.
2. Curing: Allow the printed part to cure in a well-ventilated area for the recommended time, as specified by the manufacturer. Printed parts need a lot of light to fully cure. You can use curing stations or just natural sunlight. Overcuring is not a concern with MAYER MAKES Engineering Resin.
   This material containsa visual curing indicator. The material is yellow in uncured condition and the coloring fades away during curing, peak hardness is reached when the color has completelly vanished. On big parts this process can take multiple hours depending on thickness and light intensity. If you do not require a specific colour for your parts 1 hour of curing in a quality curing station yields usable parts in general.
3. Finishing: If necessary, sand or polish the printed part to achieve the desired finish.
   Cured Parts can be mechanically altered with typical metalworking tools, like drills saws and mills.
   This allows to achieve extremely tight tolerances and press fits.

Maintenance:

1. Resin Tank: Clean the resin tank after each use to prevent contamination and buildup. Use isopropyl alcohol to clean the tank and make sure it is thoroughly rinsed before refilling with resin.
2. Printer Maintenance: Regular maintenance of your 3D printer is important to ensure optimal performance. Follow the manufacturer's instructions for cleaning and maintenance of your machine.

By following these guidelines, you can ensure that you get the best results from your MAYER MAKES Engineering Resin and enjoy a seamless 3D printing experience. If you have any questions or concerns, please contact the manufacturer for assistance.