

# Guides for Ameralabs Resins

SOURCE:

<https://support.zortrax.com/amerlabs/>

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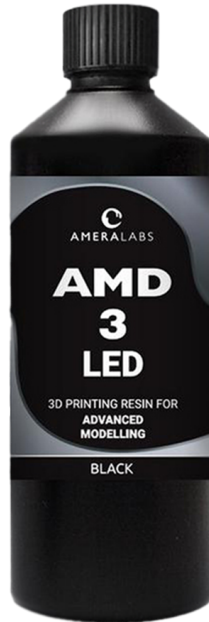
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# AMD-3 LED Resin

## PROPERTIES



- **Viscosity** at 25° C – 180 – 200 cPs
- **Hardness** (ISO 868) – 85 Shore D
- **UV Lightsource Wavelength** – 365 – 420 nm
- **Shrinkage** – ~2%

## FEATURES

- **FAST.** Resin hardens extremely fast, resulting in shorter printing time.
- **LOW VISCOSITY.** Easier to clean your parts before post-curing and to maintain all features of the original model.
- **LOW ODOR, LOW SKIN IRRITATION.** Gloves and simple ventilation is all you need to comfortably print with this resin.
- **NO PIGMENT SETTLING.** Stabilized pigment dispersion enables extremely long 3D printing sessions. There is no significant pigment settling for days.
- **LOW SHRINKAGE.** Printed models do not deform because of shrinkage.
- **BLACK COLOR.** Carefully pigmented to get ideal color that expresses the most intricate details.
- **HARD.** Final prints are hard and stiff, allowing you to capture thin parts of the model.



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## PRINT SETTINGS

The screenshot shows the Z-Suite software interface. The main window displays a 3D model of a part within a blue wireframe print volume. The settings panel on the right is open to the 'ADVANCED' tab, showing a 'MATERIAL' dropdown menu. A callout box highlights the material selection area, containing the text:

AMERALABS AMD-3 BLACK  
MODEL

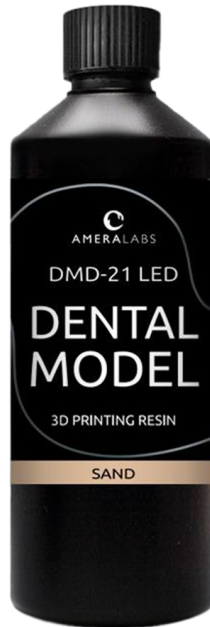
The settings panel also shows a 'PROFILE' dropdown set to 'LAST SETTINGS', a 'RESET SETTINGS' button, and a 'SAVE' button. The material list includes 'AMERALABS AMD-3 BLACK M', 'AMERALABS AMD-3 BLACK MODEL', 'AMERALABS DMD-21 DENTAL MODEL', 'POWER RESINS POWERCAST BURN', 'POWER RESINS POWERCAST BURN OPAQUE', 'SIRAYATECH BLU CLEAR V1', 'SIRAYATECH BLU CLEAR V2', and 'EXTERNAL'. The bottom of the interface features a navigation bar with buttons for '3D Printer: ZORTRAX INKSPIRE', '< BACK', 'MODEL', 'PRINT SETTINGS', 'SUPPORT', 'PREVIEW', and 'SUPPORT >'.

First, change the *Material Group* to *External*, and then select the *AMERALABS AMD-3 BLACK MODEL* from the drop-down list.

Next, set the *Layer thickness* with which you are going to print your model. This parameter determines the height of each layer. Finer layers provide better surface quality but make the printing process more time-consuming.

# DMD-21 LED Resin

## PROPERTIES



- **Viscosity** at 25° C – 200 – 220 cPs
- **Hardness** (ISO 868) – 80 – 90 Shore D
- **UV Lightsource Wavelength** – 365 – 420 nm
- **Shrinkage** – ~0,5%

## FEATURES

- **FAST.** Resin hardens extremely fast, resulting in shorter printing time.
- **LOW VISCOSITY.** Easier to clean your parts before post-curing and to maintain all features of the original model.
- **EXCELLENT DIMENSIONAL STABILITY.** Material has very low flexibility and produces models with accurate dimensions. Resistant to mechanical stress and chemicals.
- **LOW ODOR, LOW SKIN IRRITATION.** Gloves and simple ventilation is all you need to comfortably print with this resin.
- **NO PIGMENT SETTLING.** Stabilized pigment dispersion enables extremely long vertical 3D printing sessions. There is no significant pigment settling for days.
- **LOW SHRINKAGE.** Printed models do not deform because of shrinkage.
- **SAND COLOR.** Carefully pigmented to get ideal color (L=78, A=6, B=18) that

expresses the most intricate details and is pleasing for patient-facing models.

- **HARD.** Final prints are hard and stiff, allowing you to capture thin parts of the model.







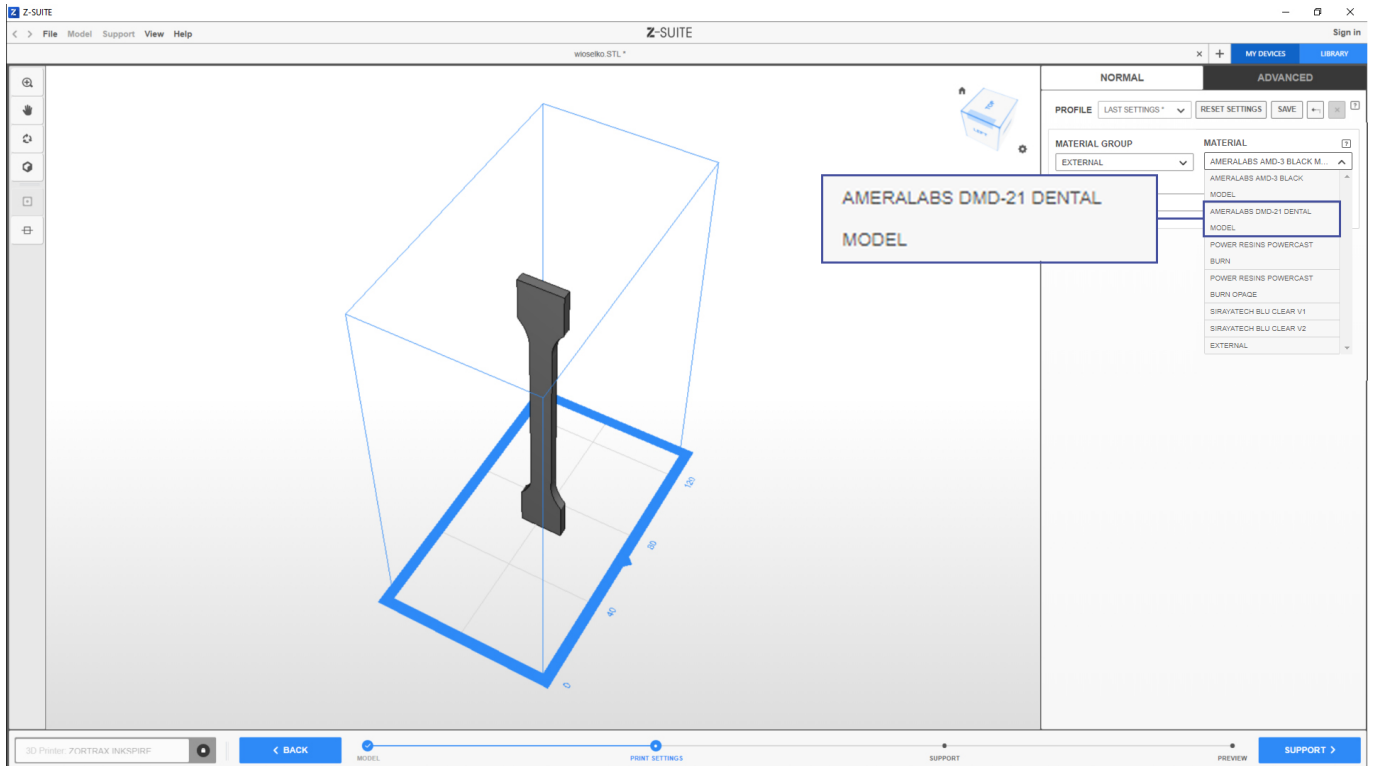
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# PRINT SETTINGS



First, change the *Material Group* to *External*, and then select the *AMERALABS DMD-21 DENTAL MODEL* from the drop-down list.

Next, set the *Layer thickness* with which you are going to print your model. This parameter determines the height of each layer. Finer layers provide better surface quality but make the printing process more time-consuming.