Making a Model Rock from Polystyrene and Epoxy Resin.

This is a quick and easy way to make models of seaside cliffs, caves, mountains, or rocky terrain for dioramas etc.

Step 1.

Break up the polystyrene into the required shapes and sizes, then bond together using a PU Mastic. Although you can use PVA glue or a contact adhesive. just be sure that there are no aggressive solvents in your adhesive that will melt the polystyrene. For example, super glue will melt this material. If you're not sure, simply do a small test on some scrap.



Step 2.

We then used a heat gun to melt the polystyrene surface. This gets rid of the beaded texture and gives the surface a more jagged rock like finish.



Here you can see the close up in more detail.



Step 3.

Next, we're going to coat the polystyrene model with **epoxy** to harden the surface and seal it. We used **ECF ART Epoxy** for its simple **2 to one mix ratio** and its available different cure speeds. However, you can also use a **general laminating epoxy** such as our **SR Green Epoxy 33** or **West System Epoxy**. Epoxy pigments can be added to the epoxy. You can also mix these pigments to create other colours.



Do not use solvent based resins to coat polystyrene. For example, polyester resins shown here contains a solvent known as styrene which will dissolve your polystyrene model in no time. There are ways to protect polystyrene against polyester, which we hope to cover in another video, but on a small model like this it isn't worth the extra process.





Step 4.

Here we're applying our epoxy which has been pigmented with Dark Admiralty Grey epoxy pigment. You could also mix other coloured batches and blend the colours as you apply. For example, after we



applied this grey, we followed on with another batch which had grey and green mixed in and applied this to break down the first flat grey colour and make the final tone more natural looking.

Step 5.

For the sandy base we applied some cream-coloured epoxy and then sprinkled on a generous amount of kiln dried sand. Once the epoxy had cured, we shook off all the excess sand.



Now our model is ready for further paintwork, fake grass, or any other added detail we wish to apply.



