

[Eggshellton Biomaterial]

Composition:	Tools:
Water 1 litre (l) Flour 110 grams (g) Eggshell 380 gram (g) Glycerine 50 Millilitre (ml) Egg cartons x10	Stove Scale Mould Pot

Method:
<p>Step 1: Collect as many eggshells as you'll need to manufacture the powder from eggshells. To eliminate all bacteria, wash the items with water before boiling them for around 15 minutes. You can scoop away any white froth that appears on the surface with a spoon. Fill a tray with the eggshells after straining the water. Put them in the oven at 120 degrees for 15-20 minutes to hasten the drying process or you can let them dry at room temperature. Once they are fully dried, remove them from the oven and grind them in a grinder to a fine powder. Grind the egg cartons as well, combine the fibre with boiling water and let it set for later use.</p> <p>Step 2: When there are no lumps and the starch is entirely dissolved, combine the water and flour starch in a pan.</p> <p>Step 3: The mixture must be heated slowly while being constantly stirred until it turns into a thick, transparent paste. If you use the same quantities as below, it takes around 5 minutes.</p> <p>Step 4: Add eggshell, egg carton mixture and glycerine after taking the pan from the heat. A thick, sandy paste will result from thorough mixing until there are no lumps. A few drops of food colouring or a natural dye can be used if you want to add colour.</p> <p>Step 5: Put the mixture on a flat surface or into a mould. Give it two days to air dry (may take longer depending on the size of the piece). * In order to ensure that the entire surface dries uniformly, moulds wider than 1 cm can be frozen for three hours before being removed. Wait until everything is completely dry before using!</p>

Properties:
The material is as solid and rigid as a rock.

Uses/processing options:	Similar to:
Grind, mould, cook, air dry, freeze, boil, sieve, blend, and pour	Concrete Paper pulp

Surprising discovery:
What's interesting about this material is that it can be like concrete if mixed well and dried well.

Tags/categories:
Cast, textured, bumpy