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ABSTRACT

Gelatine bioplastic Ge01

PROTOCOL CITATION

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MATERIALS TEXT

Glycerol, Water, Gelatine



1 Clean your surface and turn on hot plate.

VWR 220 Mini Hotplate Stirrer hotplate

VWR

SKU unknown

2 Pour **240 mL** of cold water into your pot.

- 3 Measure 12 g of Glycerol using a food scale and add it to the mixture. The amounts can be adjusted as long as the ratio remains roughly the same. Less Glycerol will result in a more brittle but harder material, more Glycerol will create a more flexible and soft sheet.
- 4 Stir mixed ingredients until there are no clumps and it is as dispersed as it's going to get. Heat mixture to 95° C or to when it starts to froth. Continue stirring mixture while heating. Keep measuring the temperature and remove the heat once it's at the right temperature or when it starts to froth. Keep stirring for another few minutes. Remove excess froth with spoon and make make sure there are no clumps in the mixture.
- Once the mixture is ready and no clumps remain, pour it directly into the previously prepared mould. Place aluminium foil underneath mould and maybe grease mould first with vegetable oil (depending on your shape and material). Spread the liquid equally throughout the surface.
- The drying period strongly depends on the thickness of the final product but also on room temperature and humidity. It may take up to several days until sheet is fully dry. Once the sheet is fully dry it can be removed from the mould carefully using a scalpel or thin knife.

