

Recipe

Carrageenan Film Ca03

Created By: [Lugae](#) [Valentina Márquez](#) [Carolina Pacheco](#)
Code:

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Image Credit : Lugae

Collection

Seaweed recipes

Process

Cooked, Dehydrator dried, Molded, Mixed,

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Difficulty



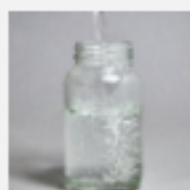
Tools

Cooker/stove/hotplate, Cooking pot, Thermometer, Weight, Tablespoon, Dehydrator, Syringe,

Source

Lugae | www.lugae.cl

Composition



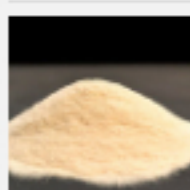
Water

350 Milliliter (mL)



Glycerol

4 Milliliter (mL)



Carrageenan Kappa

16 Gram (g)



Spirulina

2 Gram (g)

Method

Step one

In a cooking pot, pour 350 ml of distilled water. After that, with a spoon, add little by little 16g of Carrageenan Kappa. You can also use Carrageenan Iota, however this will give you a slight variations in the final material.

Step two

Turn on the cooker to a high heat and start stirring, ideally with a rubber spatula. Mix constantly and until you have dissolved all the lumps.

Step three

When the mixture becomes homogeneous, add 4 ml of glycerin. Stir and mix a little longer.

Step four

If you want your bioplastic film with color, you can use natural or mineral colorants. In the pictures, we used spirulina (0.5 gr or 2 gr for a stronger green color).

Step five

Use a thermometer and heat the mixture to 70° C. Once at 70°C, pour the mix in a heat resistant tray with a smooth surface. We used a 26x32cm tray.

Step six

Ideally, dry in a food dehydrator for 19hrs at 37°, but you can also air-dry the sample, which will take longer. Once the film dries, carefully peel off.

Gallery

