

PREPARATION OF 500 ml OF A 2% GELATINE SOLUTION

If no re-sizing is required and gelatin is only used for repairs, it is better to prepare less solution, e.g. 50 ml. A 2% solution can be diluted later if necessary. For surface sizing of paper a 0,5 - 1% solution is recommended. Always try to request a datasheet.

Chemicals

- Gelatine type B
- Demineralised or distilled water

Materials and equipment

- Laboratory balance
- Glass beaker 500 ml
- Stainless steel spoon
- Label



Procedure

- Weighing the Gelatine (10g per 500 ml water)
 - Take a 500 ml glass beaker (weighing vessel)
 - Check if the balance pan is clean and dry
 - Place the glass beaker on the laboratory balance
 - Tare the balance
 - Take some gelatine from the original container with a spoon
 - Add little by little to the beaker until 10g is reached
 - Take the beaker from the balance
 - Clean the balance if necessary
- Swelling of the gelatine in the distilled water
 - Pour demineralised water on top of the gelatine until 500 ml are reached
 - Stir the gelatine with the spoon or glass rod and leave to swell for at least an hour, or over night
- Dissolving the gelatine by warming
 - Before use the gelatine needs to be dissolved by rising the temperature to 40°C
 - Stir occasionally until the gelatine is fully dissolved

Suggested gelatine properties

- Quality: Food quality (not photo quality!),
- Type: Type B (alkaline pre-treatment), 180 – 220 Bloom
- Viscosity: low viscosity 4-5 mPas
- pH: 6
- IEP: pH 4,7-5,4
- Interaction: will bind kations due to the high amount of carboxylic groups above pH 5,4

Suppliers

GELITA Group companies: Trade name of gelatines: GELITA®. www.gelita.com
Deutsche Gelatine-Fabriken (DFG) Stoess AG: www.gelatine.org

Storage

It is preferred to prepare just the necessary amount of gelatin and use as much as possible. If there is a little left over, just pour it into the sink. If there is more left, keep it in the fridge and use it as soon as possible.

PREPARATION OF 500 ml OF A 2% GELATINE SOLUTION



Necessary equipment



Weighing the gelatine granules



Adding demineralised water



Stirring



Gelatine not yet swollen



Gelatine after 1 hour of swelling



Increasing the temperature to 40°C



Gelatine solution is ready



If necessary, the solution can be dissolved further