

Bloom test or determination of gel force



USE

Gel power measurement by compression test or Bloom value enables to quantify strength of gels, simply with a perfectly defined method, according European pharmacopeia.



METHOD

After gel preparation, according to Bloom protocol, in a defined cup with 59 mm of diameter (+/- 1mm) and 85 mm of height, realize a compression at 0.5 mm/s on 4 mm of penetration with BLOOM cylinder in the center of cup. The maximum force (F_{max}) is measured in grams and it correspond to gel strength. If the force to apply is at 50g, Bloom degree will be 50.



EQUIPEMENT

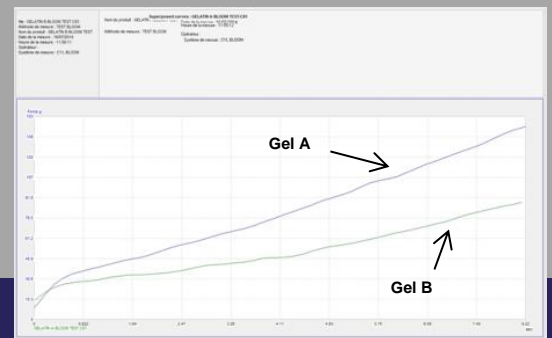


TX-700

+

Bloom
Probe

+

Software
(optional)

RESULTS

If the TX-700 is controlled by computer, the curve Strength=f(time) is drawn on the computer. Otherwise, in manual mode, the curve will be shown on the screen of the TX-700.

On this example, the values of F_{max} go from 142g for gel A to 88g for gel B.

This quick and easy method allows us to differentiate precisely the consistency of jellified products such as gelatin.