

Pharmacopoeia APPLICATION

BLOOM test on gelatine

USE

Measuring gel power using a compression test or BLOOM value, allows gel consistency to be quantified, in a simple and perfectly defined way according to European pharmacopoeia.

EQUIPMENT

Texture Analyzer: **TEX'AN TOUCH 20 N**

Probe: **BLOOM cylinder (diameter: 12.7 mm)**

Software: **TEX'AN Drive (optional)**

Temperature recording: **Pt100**

Compression speed: **0.5 mm/s**

Compression distance: **4 mm**



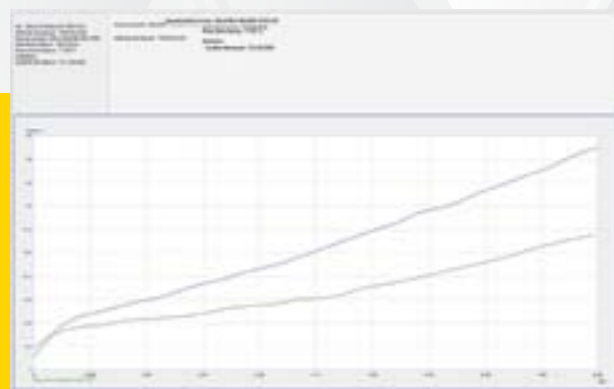
METHOD

After the gel is made, in a bottle of 59mm diameter (+/- 1mm) and 85mm height, start compression at 0.5 mm/s for 4 mm of penetration with the Bloom cylinder at the centre. Maximum Force (Fmax) measured and expressed in grams is the consistency of the gel.

RESULTS

The Force=f(time) curve is traced, if the TEX'AN TOUCH is led through the software and the Fmax value for each sample is measured. In manual mode, the Fmax is automatically displayed on the TEX'AN TOUCH screen after measurement finishes. In this example, the Fmax values range from 88g to 142g for gel B. This quick and easy method means the consistency of gelified or pasty products can be differentiated easily.

Do not hesitate to get in touch with us for more information:
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Cosmetic APPLICATION

Complete texture of styling gel

USE

CRT (Compression-Relaxation-Traction) Tests measure the Consistency, Elasticity and Adhesiveness of a product. It enables relevant parameters to be selected to define a product's texture, and which will be related to its hardness, cohesion, and adhesiveness or free-running nature.

EQUIPMENT

Texture Analyzer: **TEX'AN TOUCH 50 N**

Probe: **25 mm Cylinder**

Software: **TEX'AN Drive**

Temperature recording: **Pt100**

Compression speed: **1 mm/s**

Compression distance: **10 mm**

Relaxation time: **20 sec**

Traction speed: **2 mm/s**



METHOD

A test of 3 consecutive phases is carried out: Compression followed by a Relaxation phase without movement where the reaction force (elastic thrust) of the sample is measured, then the probe is lifted while the fluid's Traction force is measured, indicating its adhesiveness.

RESULTS

The 3 phases are identified on the curve Force =f(time) The calculated parameters are:

- Fmax = 253g which is the product's consistency in terms of defined compression (probe and distance)
- % Relaxation = 51% which is inversely proportional to the product's elasticity
- Fmin = -70 g which reflects the traction or adhesion force of the product on the probe when it is brought out of the sample.

It will therefore be easy to compare and rank different textures of products according to their response curve and the quantified values of these parameters.

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