

Thixotropy of gloss lipstick



Application

Cosmetics

Objective

Monitor the effect of thixotropic agent on a gloss filming properties

Device

HORUS®

INTRODUCTION

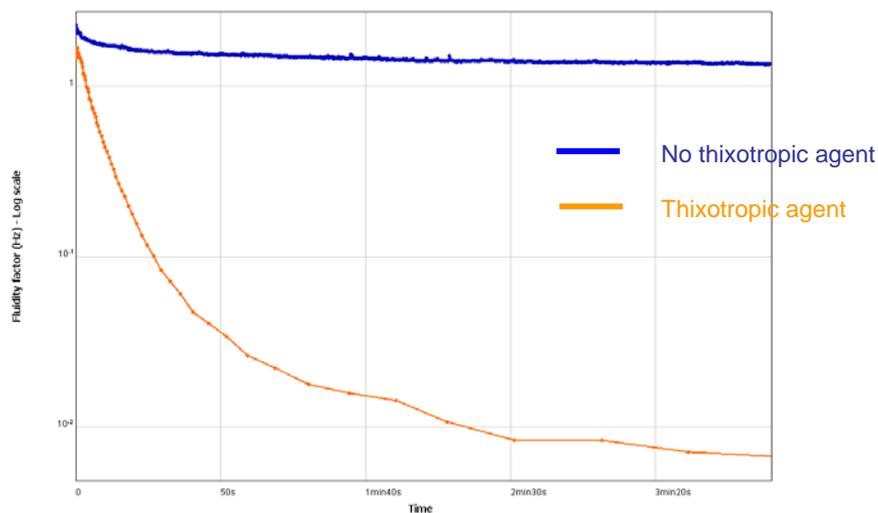
Lip gloss is a cosmetic product used primarily to give lips a shiny touch and sometimes subtle color. It is distributed as a liquid or a soft solid. It can be completely clear, translucent, or various shades of opacity, including frosted, glittered, and metallic looks. One important property required for a gloss lipstick is the thixotropic effect: the lipstick has to be easy to apply on the lips but then regain its viscosity very quickly, not to flow away.

COMMON METHOD

The behaviour of lip gloss formulations is usually studied by doing some panel tests. These consist in selecting some trained and untrained panellists, who judged the product against standard properties (ease of application, weariness, etc.). Results obtained from these kind of studies are very valuable as they give a direct measurement of the expectations of the consumer. However, they are by essence subjective and are very complex to perform. **Therefore, they are only applicable at the end of the product development and cannot be applied on every single formulation prepared in the lab.**

HORUS METHOD

Two lip gloss formulations were tested with and without thixotropic agent on glass at 120µm. On the Horus kinetics, the formulation without thixotropic agent (blue curve) remains fluid with only a small decrease in the kinetics. On the other hand the formulation with thixotropic agent (orange curve) shows a sharp decrease, characteristic of an important viscosity take-up. In few second the fluidity of the sample has dropped of two decades under the action of the thixotropic agent.



Thixotropic agent	Fluidity
With	0.007
Without	1.35

CONCLUSION

The Horus® can be used to find the right thixotropic agent to add in the formulation with the appropriate amount in order to have the best product.