

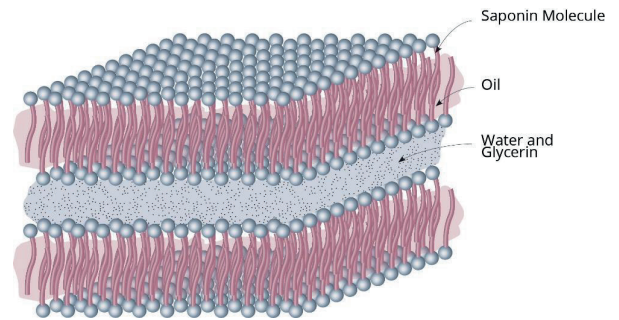
SAPOGEL® Q – FACT SHEET

Sapogel® Q is a completely natural solution to gelling oils and butters to make rich smooth balm textures. Based on saponins, this ingredient forms a lamellar structure which moisturises skin and gives a stable gel without the use of waxes.



TECHNICAL INFORMATION

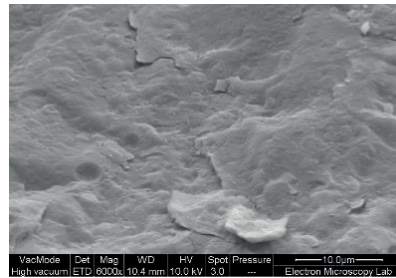
INCI	Glycerin, Aqua, Quillaja saponaria Wood Extract, Saponaria Officinalis Leaf/Root Extract
Origin	100% Vegetable – Quillaja Tree, Soapwort plant, non palm derived, vegan, gluten free
Certification	COSMOS Approved, 100% Natural Origin (ISO 16128)
Appearance	Light brown liquid



FORMULATING DETAILS

How to use Weigh Sapogel® Q and oil phase out separately. At room temperature and using an overhead stirrer with propeller blade, incorporate the oil at medium speed very slowly. The gel will turn white before becoming transparent/translucent.

Tips If butters are used, melt these in the oil phase before incorporating. Small amounts of water (up to 4%) can be added to give a more creamy texture and extra glycerine can make the product more flowable. Scrub particles and clays can be added to make a scrub or mask.



Electron microscope analysis shows Sapogel® Q gels contain layers, leading to a structural lamellar theory.

FRAMEWORK FORMULATION

Sapogel® Q	20%
Oils, butters etc.	80%
Other ingredients	qs

APPLICATIONS



Massage balm



Lip balm or masks



Face masks



Cleansing balms



Scrubs, including salt and sugar

SAPOGEL® Q



VISCOSITY & RHEOLOGY

Sapogel® Q gels have a rich, creamy texture with a typically high viscosity of 150,000 – 220,000 Cps. They thin on shearing and have a pseudoplastic rheology (behave like a solid at rest until sheared). They are highly suspending and can be used to suspend particles such as clays and exfoliators.

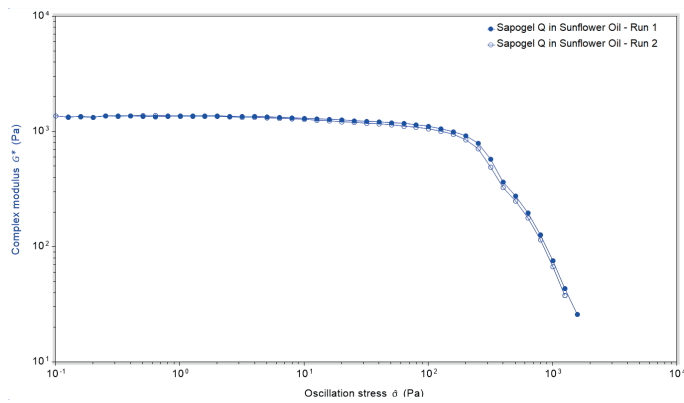


Figure 1: Complex Modulus (Pa) (Measure of rigidity) v Oscillation Stress (Pa)

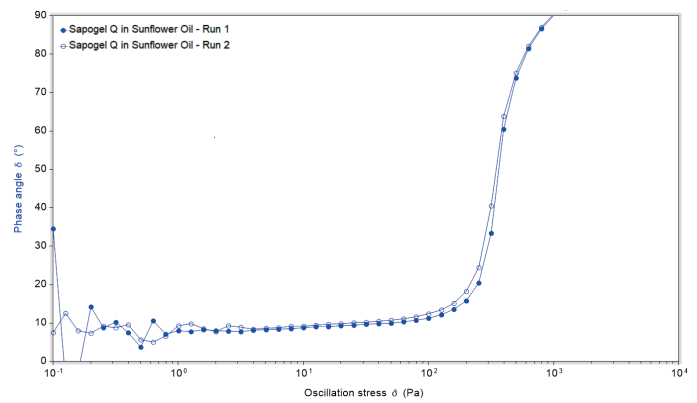


Figure 2: Phase Angle (°) (Measure of elasticity) v Oscillation Stress (Pa)

VISCOSITY DATA

Viscosity and transparency of Sapogel® Q balms with various oils

