

ALFA



Sucragel



the versatile, 100% natural oil-thickening and emulsifying ingredient based on sugar chemistry

What is Sucragel?

- > 100% vegetable origin emulsifier and oil thickener
- > Easy to use liquid product
- > Safe and mild
- > Preservative-free
- > 94% certified organic version available

Applications

- > Oil-based cleansing gels
 - > Massage products
 - > Bath gels & milks
 - > Scrubs & masks
 - > Creams and lotions
 - > Spray milks, including suncare
 - > Wipes
 - > Baby products
 - > Haircare
- ...and many more!

Gel-to-Milk Technology

Sucragel enables the formulator to make oily gels that instantly turn to milk on contact with water.

Sucragel holds oils in place in a stable micro-emulsion and when water is added the mix changes into a cream or a light lotion, giving countless possibilities.



Formulation Guidelines

- > Usage level to make an oily gel: CF & AOF - 20 to 25%; AP - 15%
- > Usage level in emulsions: 5 to 8%
- > pH range: pH4 to 8
- > Temperature: Room temperature up to 80°C

Formulation: Cleansing Gel

- > Heat phase A to 70°C to dissolve the Sucrablend SP.
- > Heat phase B to 70°C.
- > Start the propeller stirrer in phase A at a fast speed.
- > Very slowly add phase B into the mixture, increasing the stirring speed as the viscosity increases.
- > Cool to room temperature and add phase C.
- > This clear oily gel turns to milk on contact with water.

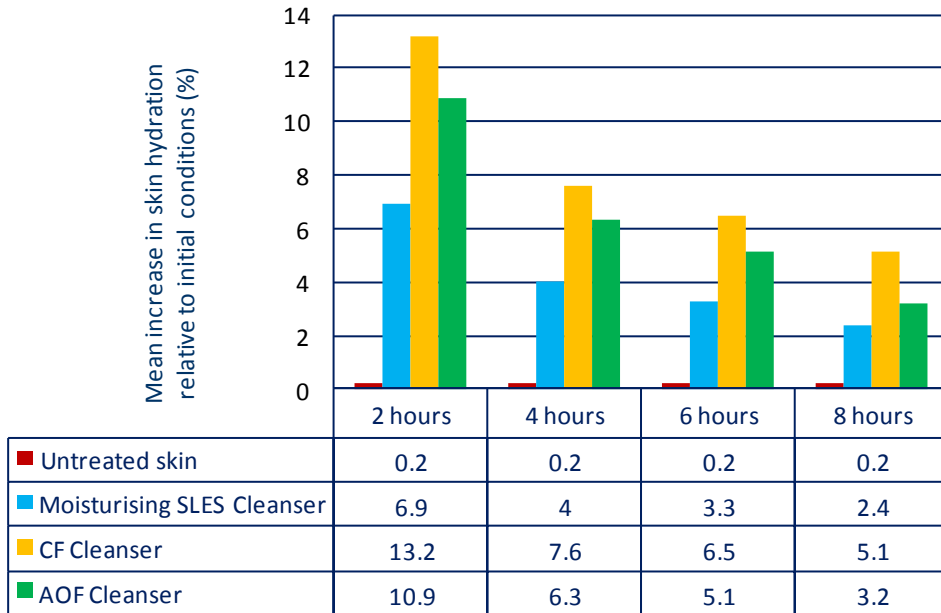
Phase	Ingredient	% w/w
A	Sucragel CF	20.0
A	Sucrablend SP	1.0
B	Caprylic/Capric Triglycerides	78.0
C	Water	1.0

Determination of Skin Hydration: *in vivo* data

A hydration study was conducted with 20 subjects using 2 oily gel cleansers, one based on Sucragel CF and one with AOF. These were compared with a moisturising SLES based cleanser.

Each of the three products were massaged onto the subject's skin before being rinsed off. Readings were then taken using a corneometer at periods of 2 hours and a comparison was made with an untreated area of the skin.

Skin Hydration Test Results



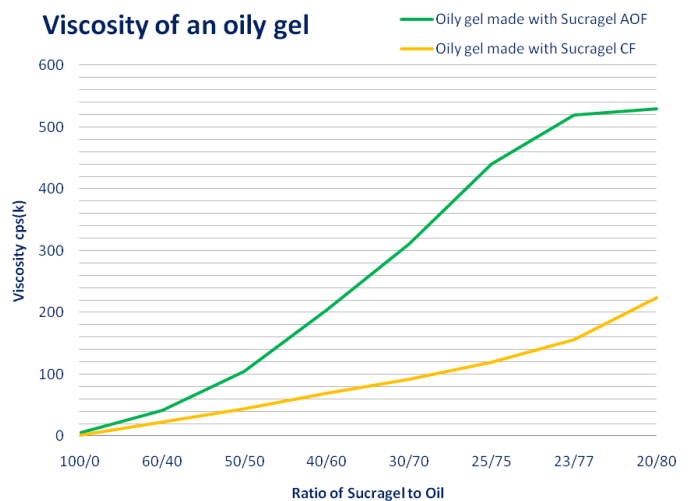
Claims:

- > Skin is twice as hydrated 2 hours after using a Sucragel based cleanser compared to using a moisturising SLES Cleanser.
- > By using Sucragel at 20% in an oily gel cleanser, skin will remain significantly hydrated after 8 hours.

⇒ **Skin stays hydrated all day and no need for moisturiser!**

How thick are the gels?

- > To decrease viscosity, add water or glycerine
- > To increase viscosity, add waxes, butters, clays or plant powders to your formulation
- > In general, using Sucragel AOF will give higher viscosity gels than using CF or AP
- > Addition of Sucrablend SP at low levels does not affect viscosity
- > More Sucragel = lower viscosity!



The Sucragel Family of Products

All glycerine used in the Sucragel range is now palm-free!

Sucragel CF

INCI: Glycerine & Caprylic/Capric Triglycerides & Aqua & Sucrose Laurate

- > Compatible with all non-polar oils, esters and sunfilters
- > Pack size: 25kg



Sucragel AOF

INCI: *Prunus Amygdalus Dulcis* (Sweet Almond) Oil & Glycerine & Aqua & Sucrose Laurate

- > Compatible with vegetable oils and butters
- > Pack size: 25kg



Sucragel AOF Bio

INCI: Glycerine & *Prunus Amygdalus Dulcis* (Sweet Almond) Oil & Sucrose Laurate & *Citrus Aurantium Dulcis* (Orange) Fruit Water

- > 94% organically certified
- > Same qualities and applications as AOF grade
- > Pack size: 5kg and 25kg



Sucragel AP

INCI: Glycerine & Aqua & Sucrose Laurate & Alcohol & Sucrose Myristate

- > Oil free
- > Lower usage level, thus more cost effective
- > Compatible with all non-polar oils, esters and sunfilters
- > Can be used as a low foaming co-surfactant
- > Can disperse small quantities of lipophilic substances
- > Pack size: 25kg

Sucrablend SP

INCI: Sucrose Palmitate & Sucrose Stearate

- > Fine white powder
- > Use at 1-2% with Sucragel CF & AP to ensure high temperature stability
- > Pack size: 1kg



Where can I find out more?

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www.alfa-chemicals.co.uk/Divisions/PersonalCare

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