

CODIF
R & N

EPS SEAMAT

Immediate Mattifying Ingredient



EPS SEAMAT



Immediate Mattifying Ingredient



Derived from Marine Biotechnology, EPS SEAMAT is a Marine Exopolysaccharide with a unique and completely new structure which gives it the property of an immediate mattifying agent.

Skin shine, major issue of oily and combination skins, is the number one enemy for a fresh and clean skin tone. It is generally caused by an overproduction of sebum which increases during the day. EPS SEAMAT absorbs the excess of sebum on the surface of the skin and reduces shine within one hour till the end of the day. Neither abrasive nor harsh, its astonishingly light and fluid texture respects oily and combination skins.

This 100% natural, qualified and purified active ingredient represents THE New Generation of cosmetic active ingredients that combines the effectiveness of synthetic molecules with the natural properties of plant extracts.

BE INSPIRED

EPS SEAMAT is a unique, pure and natural Exopolysaccharide. The Exopolysaccharide is produced by marine plankton collected from the temperate and shallow waters of the Aber-Wrac'h, on the north coast of Finistère in Brittany, France. The Abers are inlets of sea which penetrate into the coastline. They have a rich and varied ecosystem where the organisms and micro-organisms develop in both salt water from the sea and fresh water from the rain.

Once isolated and qualified, the micro-organism is cultured in a bioreactor where it secretes its Exopolysaccharide directly into the culture medium. Bioreactor culture combined with sophisticated purification systems mean that Exopolysaccharide production can be controlled. By this way reproduction of the chemical structure is guaranteed and a high purity of the final product can be ensured.

OBSERVE

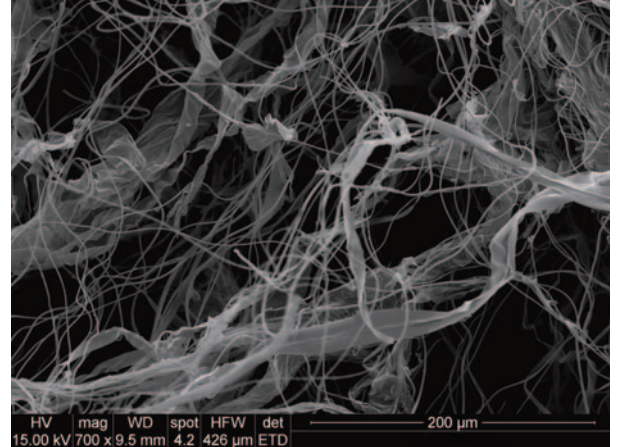
What is an Exopolysaccharide?

ExoPolySaccharides, also called EPS, are high molecular weight polymers mainly composed of sugars. They are produced and secreted by micro-organisms directly into their environment to provide protection, nutrition or adhesion to other objects.

Each micro-organism produces its own specific Exopolysaccharide with its own unique sequence of sugars.

The marine Exopolysaccharides like EPS SEAMAT have no land based equivalent and represent a new and original source of molecule.

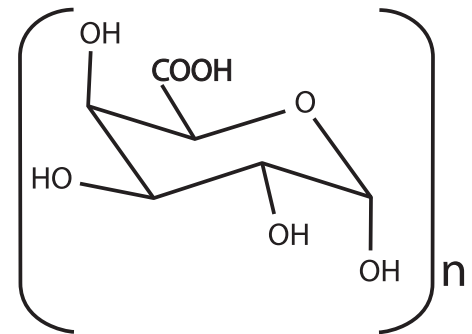
Due to its unique composition, each Exopolysaccharide possesses unrivalled surface, texture and cellular activation properties.



View of a Marine Exopolysaccharide under a scanning electron microscope

EPS SEAMAT description and qualification

EPS SEAMAT is an aqueous solution of a purified and completely sequenced Marine Exopolysaccharide. It is essentially comprised of galacturonic acid and has a molecular weight of more than 1.4 MDa (megadaltons). Its high molecular weight gives it a particular affinity for skin and surface properties which are of interest in treating cutaneous shine.

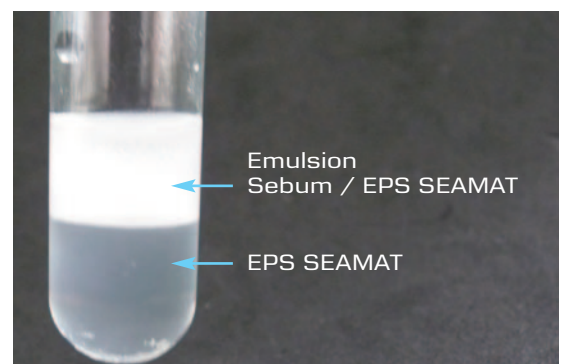
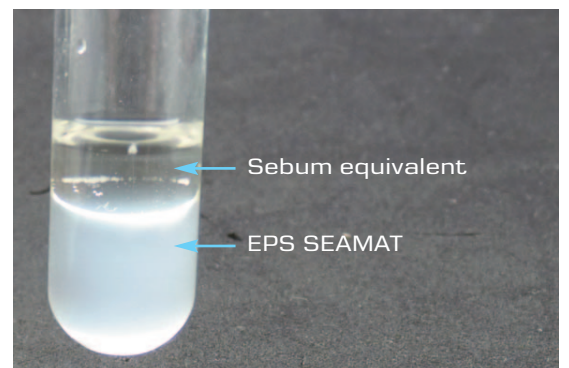


Visualisation of EPS SEAMAT capacities to absorb a sebum equivalent

Picture 1 shows a mix of sebum equivalent and EPS SEAMAT before emulsion. Oily, the sebum remains at the surface of the mixture.

Picture 2 has been taken after emulsion and highlights the capacities of EPS SEAMAT to emulsionate the sebum equivalent. The sebum is absorbed and trapped by EPS SEAMAT.

This capacity to absorb sebum explains the immediate mattifying properties of EPS SEAMAT when it is applied on the skin.



CLINICAL TEST

EFFECT OF EPS SEAMAT ON SEBUM PRODUCTION

Protocol

12 volunteers with either combination or oily skin
Sebum level evaluated with a sebumeter.
Single application of 2% EPS SEAMAT at 8.30 am.

NATURAL CHANGE IN SEBUM LEVEL DURING THE DAY.

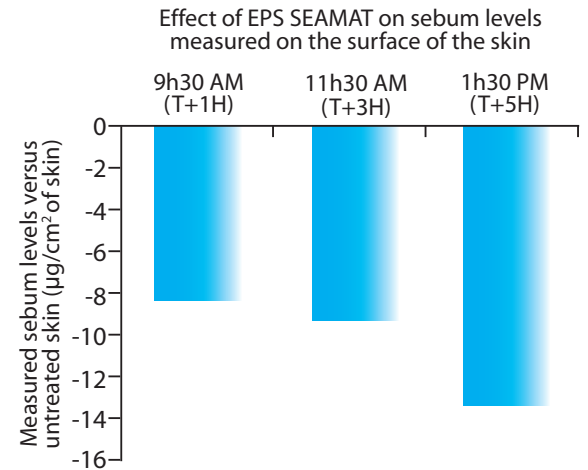
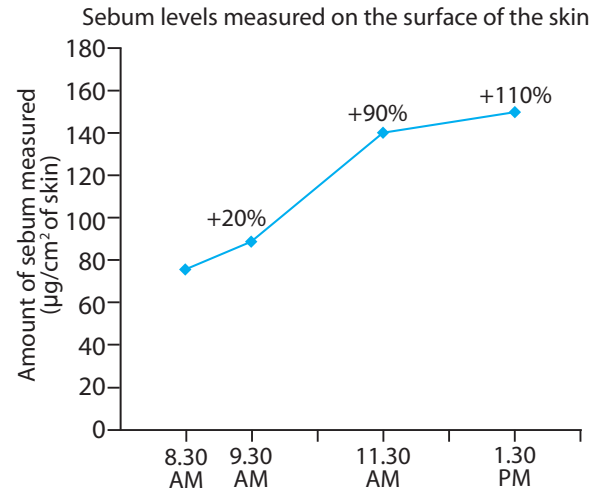
The average sebum level at the beginning of the day (<math><100\mu\text{g}/\text{cm}^2</math>) is characteristic of combination skins while the level observed at the beginning of the afternoon (>150 $\mu\text{g}/\text{cm}^2$) is characteristic of oily skins.

The amount of sebum produced by the sebaceous glands increases with time. By midday it has already increased by a factor 2.

SEBO-ABSORBER EFFECT OF EPS SEAMAT

Application of EPS SEAMAT masks the amount of sebum on the surface of the skin. This is explained by capacity of EPS SEAMAT to absorb and to trap the sebum.

A single application of 2% EPS SEAMAT is sufficient to absorb the excess of sebum on the surface of the skin throughout the day. This result means we will have anti-shine properties.



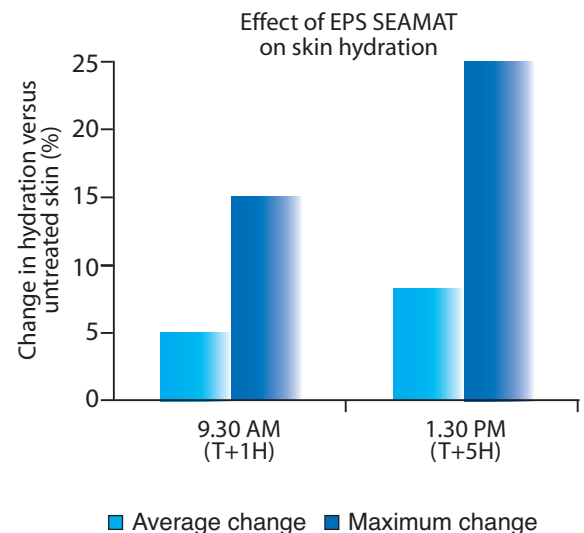
CLINICAL TEST

EFFECT OF EPS SEAMAT ON CUTANEOUS HYDRATION

Demonstration of the absence of dehydrating effect of EPS SEAMAT during the day.

Corneometry analysis of the hydration level of 9 volunteers to whom 2% EPS SEAMAT was applied showed, apart from no dehydration, a slight increase in skin moisture levels.

EPS SEAMAT absorbs the excess of sebum on the skin surface without attacking or harming the epidermis which maintains its original hydration level.



REVEAL

CLINICAL TEST

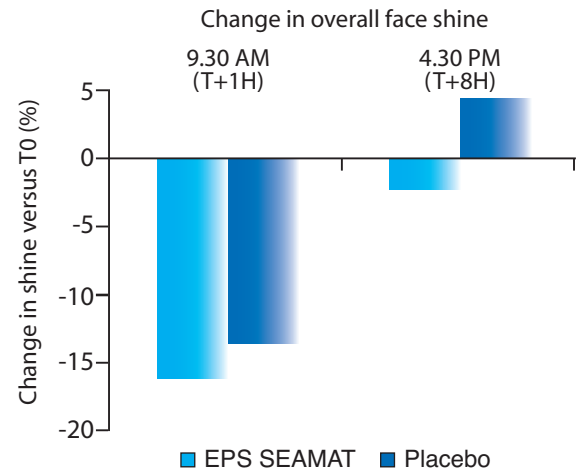
EFFECT OF EPS SEAMAT ON SKIN SHINE

Protocol :

16 volunteers with oily and shiny skin.
Skin shine analysed using crossed and uncrossed polarised digital photographs.
Single application of 2% EPS SEAMAT at 8.30 AM.

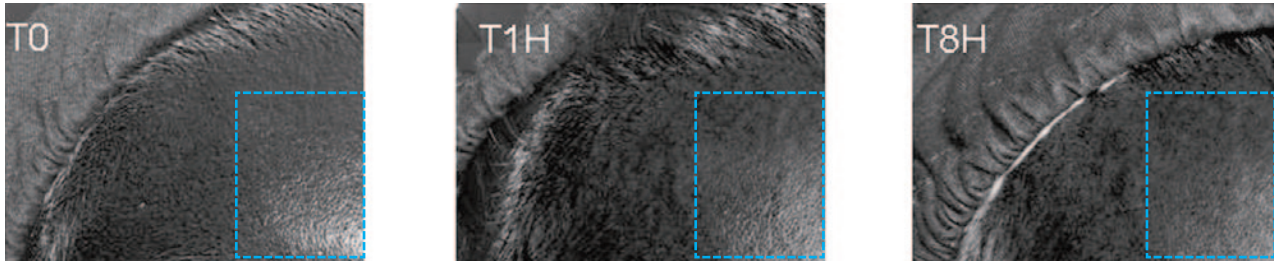
Change in overall shine of the face :

EPS SEAMAT reduces skin shine from 1 hour after application. 8 hours after application the placebo increases the initial skin shine while EPS SEAMAT continues to reduce it.
With EPS SEAMAT the shine at the end of the day is lower than the shine observed in the morning before application.

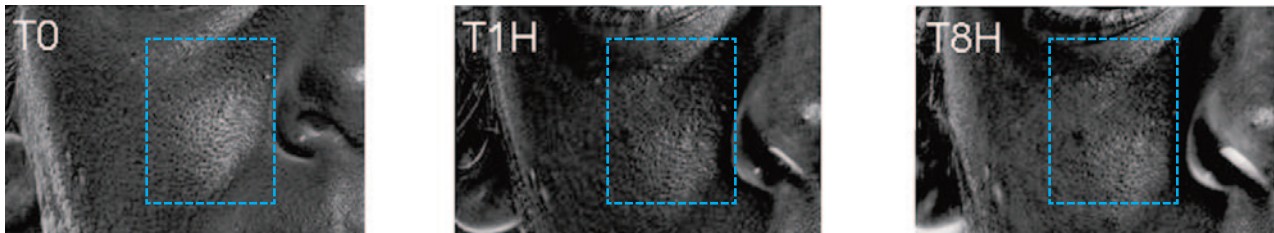


Change in shine on the forehead, the cheek and the chin areas :

Change in forehead shine: 8% reduction on average 1 hr after application / 0.1% reduction after 8 hrs



Change in cheek shine: 20% reduction on average 1 hr after application / 6.6% reduction after 8 hrs



Change in chin shine: 22% reduction on average 1 hr after application / 2% reduction after 8 hrs



Even though the natural production of sebum doubles by midday, a single application of EPS SEAMAT is sufficient to absorb the excess of sebum and produce anti-shine results 1 hour after application. At the end of the day the overall skin shine, is still lower than the shine measured earlier in the morning before the product was applied.

EPS SEAMAT: Immediate Mattifying Ingredient

Cosmetic Effects

- Absorbs excess of sebum on the surface of the skin
- Overall anti-shine effect on the skin after 1 hour
- Reduces shine in the forehead, cheeks and chin after 1 hour.
- Not dehydrating (hydrating)
- Light and fluid texture

INCI Name

- EPS SEAMAT PA: Water (and) Plankton extract (and) Phenethyl alcohol
- EPS SEAMAT P: Water (and) Plankton extract (and) Phenoxyethanol



% dilution recommended

- EPS SEAMAT PA : 2%
- EPS SEAMAT P : 2%



CODIF
R&N

Technical department : infotech@codif-recherche-et-nature.com

Commercial department : commercial@codif-recherche-et-nature.com

70, rue du Commandant l'Herminier - BP11709 - 35417 Saint-Malo cedex - FRANCE

Tel : +33-2-23-18-31-07 Fax : +33-2-23-18-31-01

www.codif-recherche-et-nature.com



CODIF Recherche & Nature is committed to sustainable development.

All our wastewater is processed and purified using filtrating gardens.
A succession of airtight horizontal and vertical filters is used to depollute wastewater by the roots of plant species chosen for their draining properties.

Iris, water mint, flowering rush, willows etc... now form part of the image of the brand which is recognized for its commitment to the preservation of natural resources.