

RAW MATERIAL INFORMATION
NATURA-TEC MARINE BLUEVITAL C
Product identification

Manufacturer : Natura-tec

Country of origin : France

Custom Tariff : 29159070

CTFA and JCIA registered

Manufacturing process and chemical composition
Manufacturing process:

Natura-Tec Marine BlueVital C is obtained by the careful combination of the Caprylic Capric Triglyceride with the Cylindrotheca Fusiformis Extract following a maceration process in a closed container at cold temperature under specific agitation during a controlled time. The final product is then packed under nitrogen

The microalgae inoculum of Cylindrotheca Fusiformis is cultivated in our photosynthetic field, in our plant on the Riviera, in closed photobioreactor,

The bioreactor is provided with appropriate sunlight and CO₂

The inoculum multiplies in a specific culture medium and the microalgae biomass is obtained following a certain time of cultivation .

The biomass is then harvested , dried and controlled .

The biomass is then extracted to obtain the Cylindrotheca Fusiformis Extract.

Chemical composition:

INCI/USA	INCI/EEC	CAS No.	EINECS / ELINCS No.	Function	%
Caprylic/Capric Triglyceride	Caprylic/Capric Triglyceride	73398-61-5	277-452-2	Active	QSP
Cylindrotheca Fusiformis Extract	Cylindrotheca Fusiformis Extract	1621603-00-6	--		< 5%

Our **Natura-Tec Marine BlueVital C** does not contain additives

Impurities:

Impurities	Nature	Specification, ppm
Heavy metals	Pb	< 5
	As	< 3
	Cd	< 1
	Hg	< 1
	Cr	< 5
	Cu	< 5
	Ni	< 5
	Se	< 5
	Zn	< 5
	Ba	< 10
	Sb	< 5
	Co	< 5
Pesticides		None
Other impurities		Absence

Decontamination by radioactivity

We hereby certify that the product **Natura-tec Marine BlueVital C** has not been treated with ionising radiation.

Reach compliance / CLP classification

Reach (CE regulation n°1907/2006)

INCI/USA	CAS No.	EINECS / ELINCS No.	Pre-registration	Registration number
Caprylic/Capric Triglyceride	73398-61-5	277-452-2	Yes	01-2119492306-35-0012
Cylindrotheca Fusiformis Extract	1621603-00-6	--	Exempted	

CLP classification

Natura-tec Marine BlueVital C is not classified under regulation CE 1272/2008

Ingredient of vegetable origin

General description of the vegetable ingredients		
INCI name of the ingredient of vegetable origin	Caprylic/Capric Triglyceride	Cylindrotheca Fusiformis Extract
Name of the vegetable (genus – species - family)	Genus :Cocos Species : C. nucifera Family : Arecaceae	Division : Bacillariophyta - diatoms Order : Bacillariales Family : Bacillariaceae Genus : Cylindrotheca Species : Cylindrotheca Fusiformis
Part used	Fruit	Microalgae inoculum
Geographical origin	Dominican Republic	Northern Atlantic ocean
Is the plant cultivated or natural?	Cultivated	Cultivated
Is it a regulated vegetal species (CITES, IUCN red list...)?	No	No

Storage conditions

Packaging : Plastic canisters of 1Kg, 10Kg and 25Kg net.
 Storage : Store in a cool dry place, below 10°C, away from light in original unopened packaging.
 Shelf life : 12 months in original unopened packaging

Toxicological data

From information available, **Natura-Tec Marine BlueVital C** is non-toxic under normal conditions of use.

HET CAM Test

The “Hen's Egg Test - chorioallantoic membrane” is an approved alternative Ocular irritating test to the Draize test.
 Aim : observe the irritating effects (hyperemia, hemorrhage, clotting) that may occur within 5 minutes after the deposit of a substance on the CAM chorioallantoic membrane of an embryonic chicken egg.

Natura-Tec Marine BlueVital C has been tested undiluted on the CAM of 6 fertilized eggs in specific conditions.

Results : Slightly irritant (IS value = $2,67 \pm 1,14$)

Cytotoxicity test – MTT test

MTT - In vitro evaluation of the cytotoxicity of a cosmetic product with an assay on fibroblasts/keratinocyte cell cultures (UNI/EN ISO 10993-5: 2009 (E))

The MTT assay (colorimetric test) evaluates in vitro the vitality of cells exposed to different concentrations of the investigated cosmetic product in comparison with untreated cells.

Results : Natura-Tec Marine BlueVital C is non cytotoxic at 0,5%, 1,0%, 2,0% of use.

Regulatory information - Certificates

Cosmetic directive compliance

In conformance to the EC Directive n° 1223/2009 in respect to the use in cosmetic products, **Natura-Tec Marine BlueVital C** is exempted of prohibited substances (Annex II) and restricted substances (Annex III). **Natura-Tec Marine BlueVital C** is exempted of Phtalates, nonylphenol, alkylphenols, phenol, nitrosamines, glycol ethers.

GMO certificate

We hereby certify that **Natura-Tec Marine BlueVital C** does not contain ingredients from genetically modified organisms in accordance with EC Regulations 1829/2003 and 1830/2003.

Non animal testing

We hereby confirm that **Natura-Tec Marine BlueVital C** of our manufacture, has not been tested on animals.

Absence CMR

It is certified that the product **Natura-Tec Marine BlueVital C** does not contain carcinogenic, mutagenic or reprotoxic (CMR) substances of categories 1, 2, 3 or 1A, 1B or 2 listed in regulation 1272/2008 and amendments: commission regulation (CE) n° 790/2009 and n°286/2011.

Absence of allergens certificate

It is hereby certified that the product **Natura-Tec Marine BlueVital C** of our manufacture, does not contain any of the 26 allergens listed in the Cosmetic Directive CEE / 76 / 768 and amendments

Absence SVHC

It is certified that the product **Natura-Tec Marine BlueVital C** of our manufacture does not contain substances identified as SVHC featuring in the "REACH candidate list" published.

The "REACH candidate list" is present on ECHA web site and has been updated in in December 2014.

Link: http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp

BSE statement

We, the undersigned, certify that during the manufacturing process of our **Natura-Tec Marine BlueVital C**:

- No material derived from animal has been used during the manufacture, processing or packing / re-packing.
- There is no risk of cross contamination from products derived from animal during the manufacture, processing or packing / re-packing

Gluten free

We certify that the product **Natura-Tec Marine BlueVital C** that we manufacture is Gluten free.

Microbiological specification

Natura-Tec Marine BlueVital C respects the below specifications :

- Total aerobic mesophilic bacteria < 100 cfu/g/ml
- Yeasts and molds < 100 cfu/g/ml
- Absence of pathogen micro-organisms :
 - Absence of Pseudomonas aeruginosa
 - Absence of Escherichia coli
 - Absence of Staphylococcus aureus
 - Absence of Candida albicans

Nanomaterial free

We hereby certify that our **Natura-Tec Marine BlueVital C** does not contain nanomaterials.

Preservative free

We hereby certify that our **Natura-Tec Marine BlueVital C** does not contain preservatives

Palm free

We hereby certify that our **Natura-Tec Marine BlueVital C** is palm free

Global restriction

Europe	No restriction
USA	No restriction
Canada	No restriction
Japan	No restriction
China	Registered under : Caprylic/Capric Triglyceride (and) Algae Extract - Species : "Cylindrotheca Fusiformis"
Australia	No restriction
Korea	No restriction

Efficacy tests

PROPERTIES

Formulation of anti-ageing, anti-wrinkle treatments tailored to suit the story of your skin.
It will inspire your lifestyle, your emotions and your environment with an action on the youth and vitality of your skin.

Skin care (0,5 – 2,0%) Anti-wrinkle, anti-ageing and moisturising creams, daily creams, eye serums
In all kinds of products (sun care, make up, etc) for a "Blue" anti-ageing / anti-wrinkle claim.

COLLAGEN SYNTHESIS - IN-VITRO TEST

Aim of study

In vitro evaluation of collagen synthesis in human skin fibroblasts exposed to our Natura-Tec Marine BlueVital C at different concentrations. Collagen synthesis is measured by means of colorimetric assays.

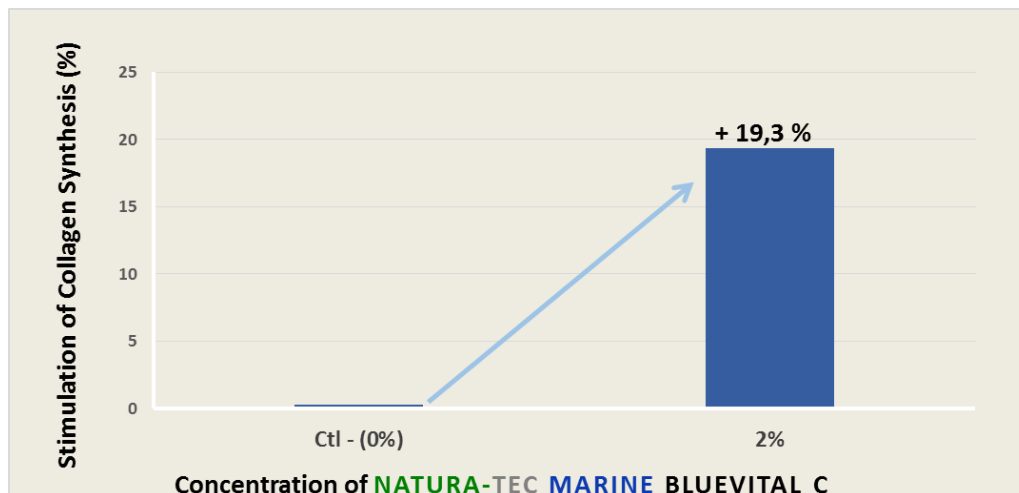
Protocol

Monolayer culture of human fibroblasts (ATCC-CRL-2703)
Three different concentrations : 0.5%, 1.0% and 2.0%
Three different times : 24h, 48h, 72h
Controls without the active

Collagen assay : Quantitative dye-binding method with Sirius Red.

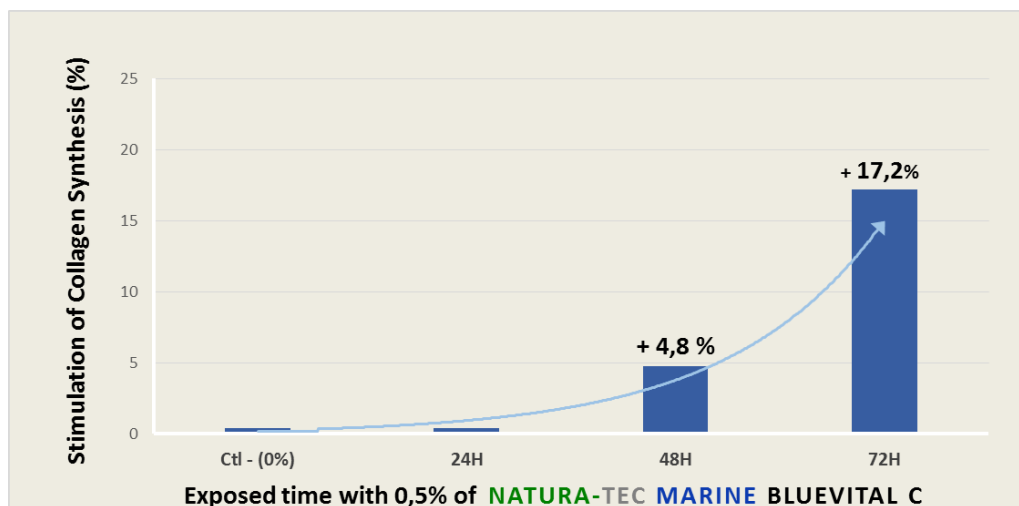
Results : Mesure of mean collagen content (µg) and % variation compared to untreated cell cultures (CTR-).

Capacity of Natura-Tec Marine BlueVital C to stimulate synthesis of Collagen on fibroblasts in 24H



Used at 2%, increase of collagen synthesis by 19,3% in 24h.

Capacity of Natura-Tec Marine BlueVital C to stimulate synthesis of Collagen on fibroblasts in 24H, 48H, 72H at 0,5%



Used at 0,5%, gradual increase of collagen synthesis by 17,2% in 72 hours.

Natura-Tec Marine BlueVital C has an immediate and excellent efficacy on collagen synthesis at 2%
At small dosage (less than 1%), **Natura-Tec Marine BlueVital C** has a time – dependent good efficacy

Highly effective active : with 0,5% almost same collagen production as with 2% over a slightly longer period

2 concentrations of use depending on the age of consumer

- ❖ For 50+ years old – use at 2%
- ❖ From 20 to 40 years old – use 1% or less

EVALUATION OF THE ANTI-WRINKLE EFFICACY

Aim of study :

In vivo evaluation of changes of the wrinkles after a repeated application on healthy human skin of two cosmetic products (with and without our Natura-Tec Marine BlueVital C) by fringe projection.

Protocol

21 volunteers, female, 35 – 55 years, T0-T1m-T2m, hemi-facial application of the active cream (1,5% of Natura-Tec Marine BlueVital C) and placebo cream twice per day.

Technique

Dermatop Blue uses Breuckmann technology based on a fringe projection unit using blue light combined with imaging techniques.

Calculations and statistics

Rz (mm): Average Maximum profile height difference : represents the average width of the negative peak

Ra (mm): Linear average profile roughness: represents the arithmetic average of the volume of the micro profile of the skin.

Variation % = $[(v1-v0)/v0] \times 100$, Student t-test $\alpha=5\%$

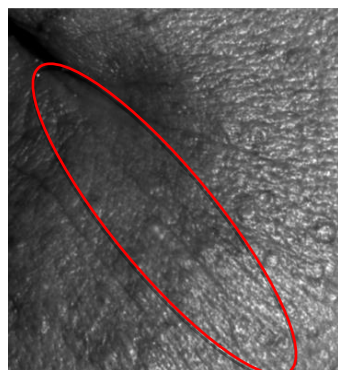
Results :

Placebo	1 month		2 months	
Compared to T0, %	Marine BlueVital C	Placebo	Marine BlueVital C	Placebo
Main wrinkle average depth (Rz)	-8,2% $\alpha < 0,01$	0,4% ns	-10,4% $\alpha < 0,01$	0,5% ns
Main wrinkle average volume (Ra)	-8,8% $\alpha < 0,01$	-0,2% ns	-12,0% $\alpha < 0,01$	-0,1% ns

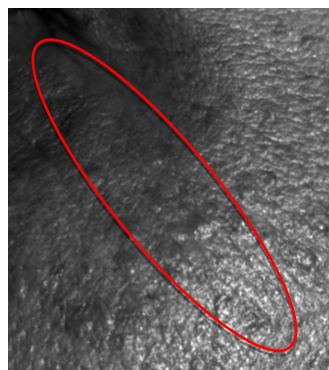
Natura-Tec Marine BlueVital C significantly decreases wrinkle depth and volume at only 1,5% of use and already after 1 month of use

Illustrative results :

Photo of wrinkles crow's feet before and after application of a cream with 1.5% **Natura-Tec Marine BlueVital C**

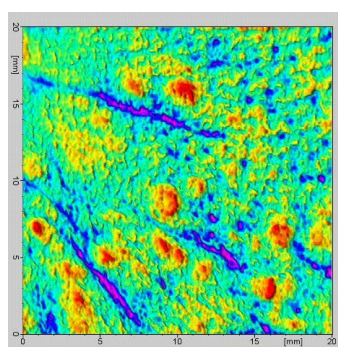


T0

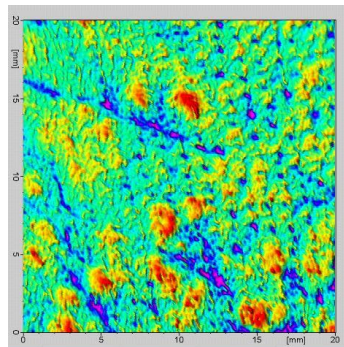


T2 months

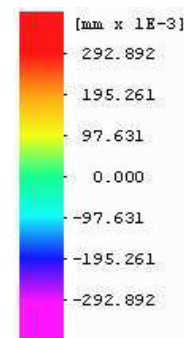
Micro-relief evaluation showing skin improvement in 2 months—Dermasurf software



T0



T2 months



Natura-Tec Marine BlueVital C visibly decreases appearance of wrinkles at only 1,5% of use after 2 months of use

The formulation containing 1,5% Natura-Tec Marine Blue vital C shows significant anti-wrinkle results when compared to the placebo formulation.

In 2 months, with 2 applications per day, the wrinkle depth decreases by 10,4%, and the wrinkle volume decreases by 12% when compared to T0.

Regulatory Affairs Manager : Pascale Goyat

Fréjus, July 2017



This document completes the product technical and safety data sheet. Information contained in this notice are based on our current knowledge and relate to the product in the state in which it is delivered

This certificate does not exempt or prevent the user to test under its own responsibility the material described in the document