

SPIRULINA POWDER ET-F & LINABLUE G1-S

8 December 2020



SunChemical[®]

a member of the DIC group



Color & Comfort

working for you.

Consumers ask for sustainable products

In the UK
79%
of adults feel personal care and beauty brands need to put more effort into ethical and sustainable product production

In the US
34%
of 18-24 years old look for brands that have sustainability strategies in place

In China
68%
of adults want brands and companies to support environmental sustainability

SUSTAINABLE & ETHICAL
Ingredients

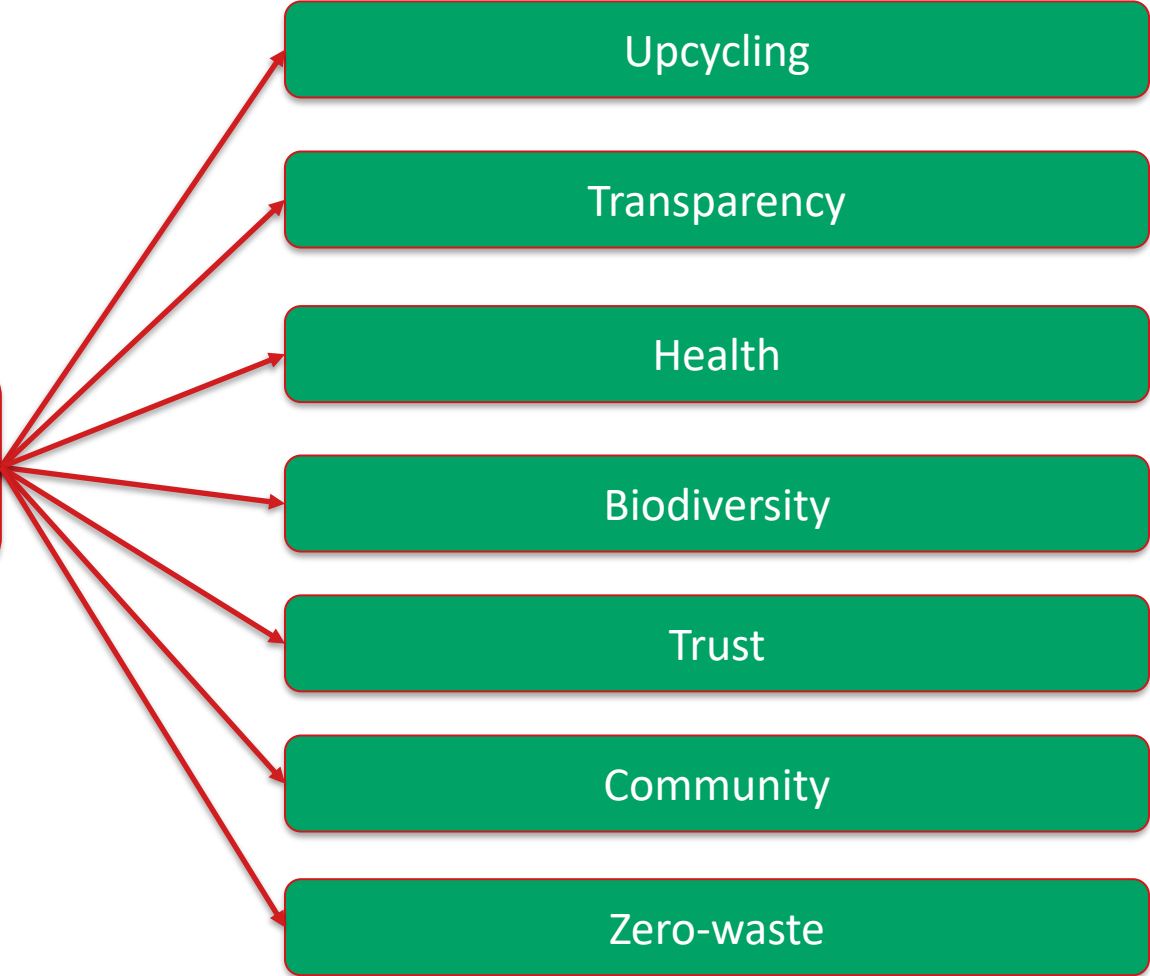
CRUELTY-FREE	ORGANIC & NATURAL
VEGAN	PALM OIL FREE



How people are thinking about consumption ?



New trends are born



What's driving the future of beauty?



Today's beauty consumers want to be confident that the products they buy are as kind to the planet as they are to the skin





The largest and oldest producer of Spirulina

Spirulina – Inspired by nature, realized by science

- ✓ A naturally occurring blue-green algae which forms on the surface of lakes
- ✓ An incredibly high source of nutrients, amino acids and iron – Superfood ingredient
- ✓ Spirulina contains Vitamin E, selenium and tyrosine, which are all known for their powerful anti-aging effects.

Since 1978

THE GREEN BEAUTY

Two certified manufacturing farms



Earthrise Nutritional, LLC.
(100% capitalized, CA, USA)

FSSC22000
GRAS
GMP
HALAL
KOSHER
NON-GMO
Processed Food Registration

US Site : Sonoran Desert (California) – far from cities, highways and airports – the air is clean
100% pure during its entire growth process – do not use irradiation, chemicals, herbicides or pesticides
> No waste : 100% water recycled, no draining



Hainan DIC Microalgae Co., Ltd.
(100% capitalized, Hainan, China)

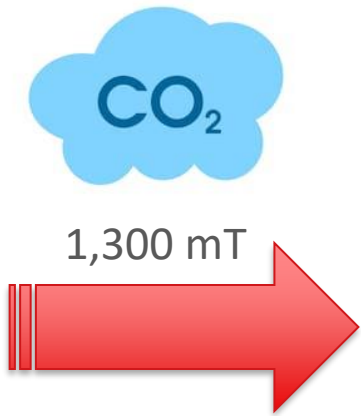
FSSC22000
ISO9001
GMP
HACCP
HALAL
KOSHER
Hygienic Certificate
食品生產許可書
Environmentally friendly

China Site : Hainan Island (Asian Hawaii) – far from cities, highways and airports – the air is clean
100% pure during its entire growth process – do not use irradiation, chemicals, herbicides or pesticides
> No waste : water treatment and draining

100%
traceability

Food & Cosmetic Grade Quality – non-GMO ingredient

A sustainable process



Earthrise Nutritional, LLC.
(100% capitalized, CA, USA)

800 – 900 mT
Spirulina



Hainan DIC Microalgae Co., Ltd.
(100% capitalized, Hainan, China)



Equivalent to
oxygen
released by
400-hectare
forest



Two natural cosmetic ingredients

- Spirulina Powder ET-F



- Linablue G1-S



SPIRULINA POWDER ET-F



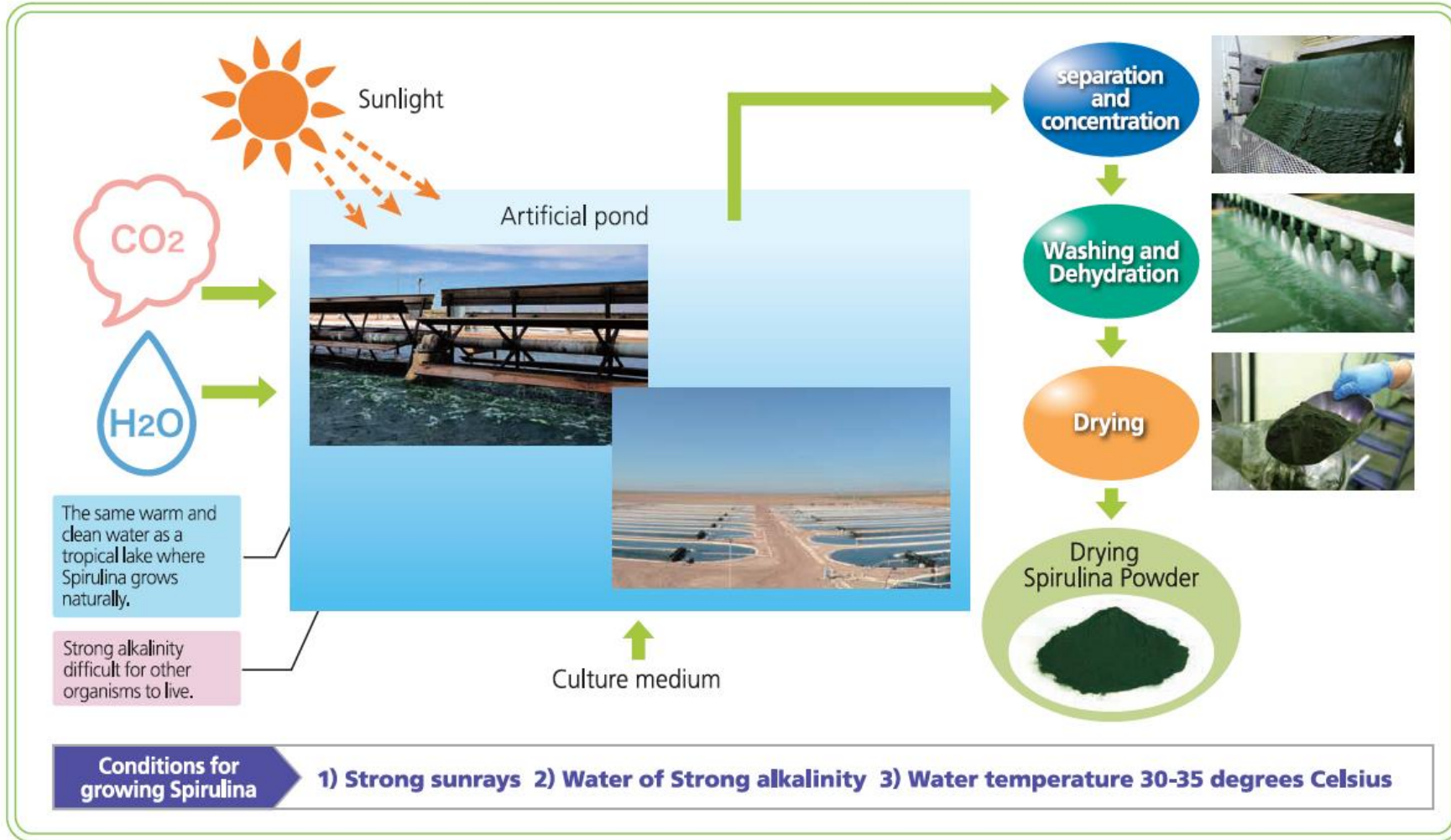
SPIRULINA POWDER ET-F

GREEN PROCESS PURIFICATION



COSMOS APPROVED

ISO 16128-2
100% natural content



SPIRULINA POWDER ET-F

WHAT ARE THE BENEFITS OF SPIRULINA FOR THE SKIN ?

- Decreases inflammation*
- Tones the skin*
- Encourages cell turnover*



Boost the health and vitality of your skin

* : Bibliography

SPIRULINA POWDER ET-F

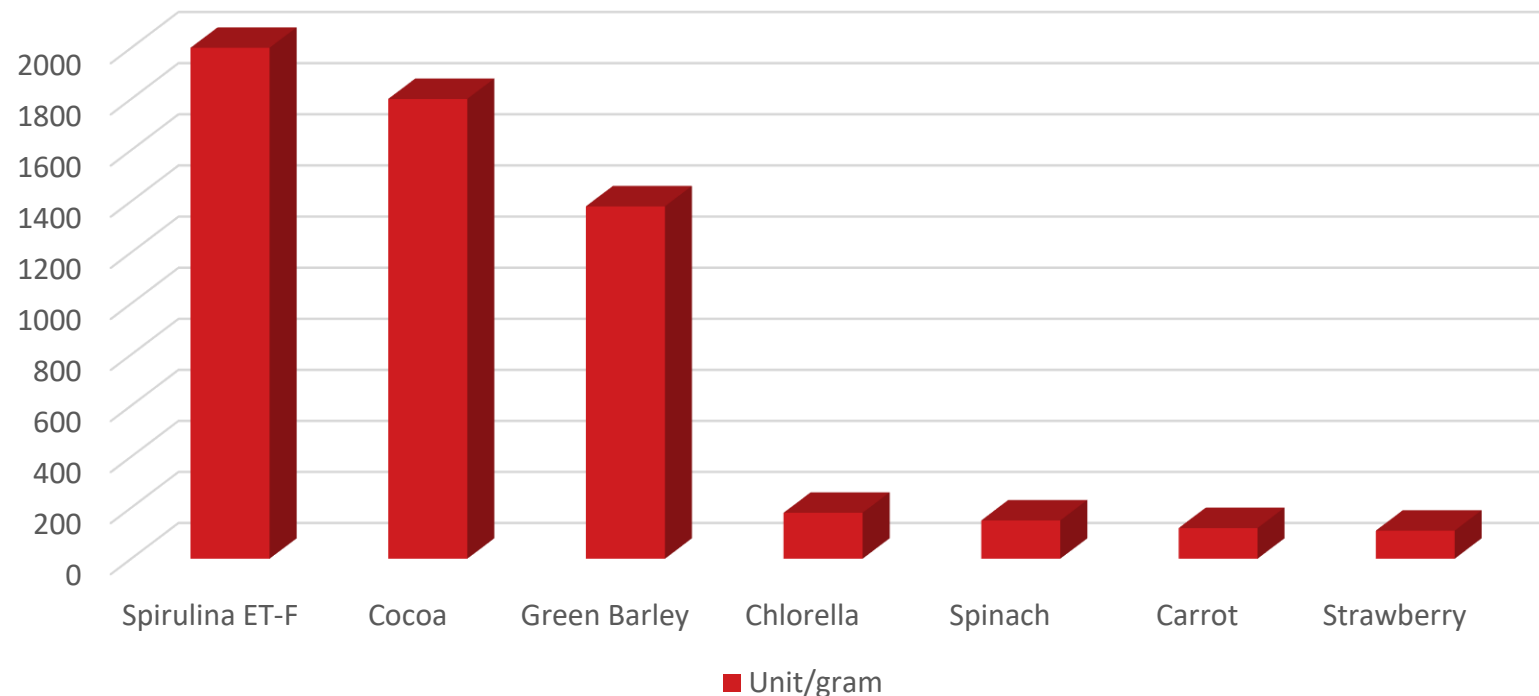
WHAT ARE THE BENEFITS OF SPIRULINA ET-F FOR THE SKIN ?



The best antioxidant active ingredient ?

Super **O**xide **D**ismutase activity

SOD activity's comparison to main natural ingredients*



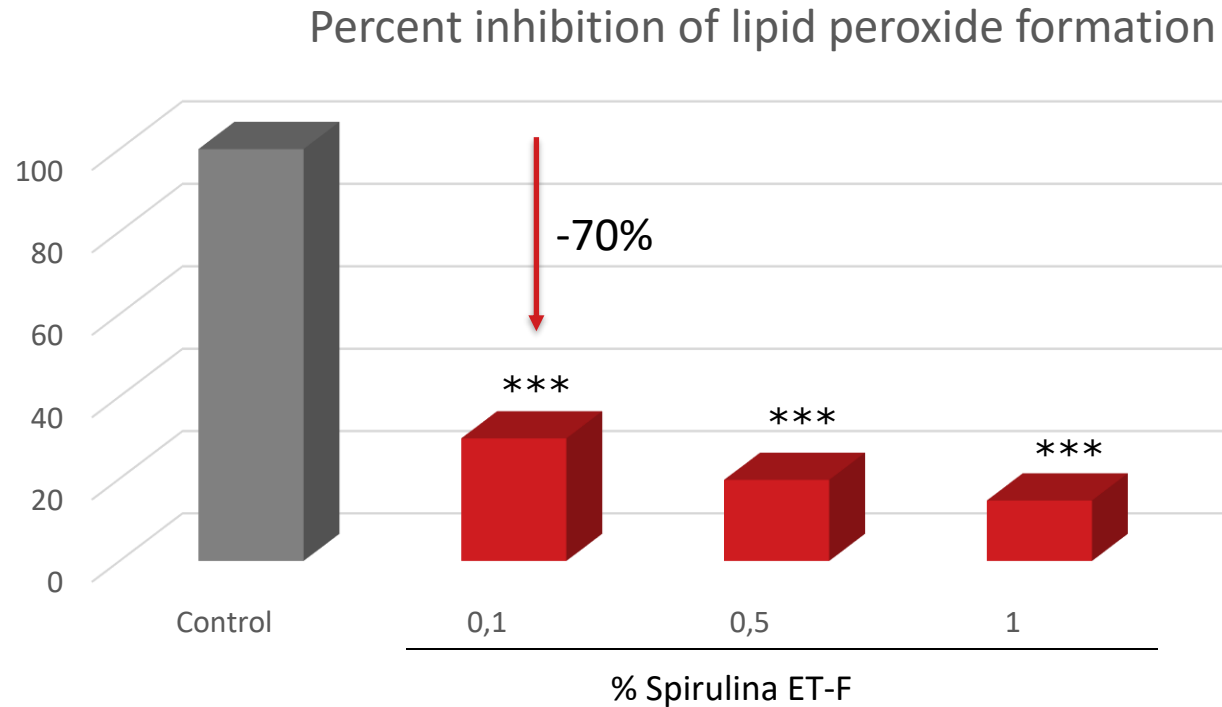
**In tubo* - Superoxide scavenging activity method
McCord, J. M., and Fridovich, I. Superoxide dismutase (1969)

SPIRULINA POWDER ET-F

WHAT ARE THE BENEFITS OF SPIRULINA ET-F FOR THE SKIN ?



Inhibition of lipid peroxidation*



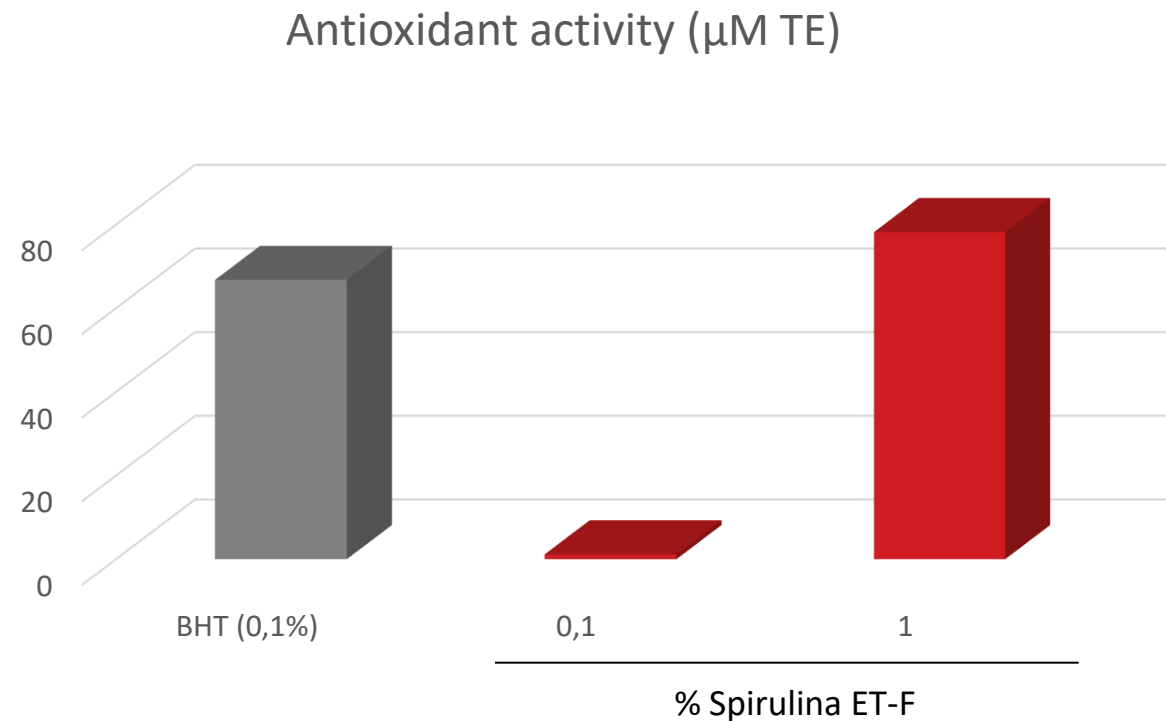
**In tubo* – Oxidation of Linoleic Acid
Unpaired t-test, *** P < 0.001

SPIRULINA POWDER ET-F

WHAT ARE THE BENEFITS OF SPIRULINA ET-F FOR THE SKIN ?



DPPH assay*



**In tubo* – expressed in μM Trolox Equivalent

SPIRULINA POWDER ET-F

Main Claims and Applications

Claims :

- . Natural deep intense green ingredient
- . With strong antioxidant activity

Applications :

- . Make up eyeshadow, nailpolish, lip gloss, lip scrub, lip oil
- . Make up emulsion, powder, oily gel
- . Face mask
- . Soap
- . Toothpaste
- . Skin care
- . In & Out concept

CLEAN
beauty



Spirulina powder eyeshadow



In & Out



Spirulina nailpolish

SPIRULINA POWDER ET-F

Technical information

INCI name : *Spirulina (Arthrospira) Platensis Powder*

Product code : ACI-0101

HS code : 2102.20

Appearance : Blue-green powder

Odor : Characteristic

Particle size : 20 micrometer

Titrated in Chlorophyll, Phycocyanin and Carotenoids

Raw material origin : USA

Microbiological specifications :

<100 CFU/g Bacteria, Yeast and Mold

Preservation : none

Heat sterilized

Shelf life : 4 years

Compliance :

ISO 16128-2 : 100% natural content

Cosmos, China and REACH

Vegan and Halal

Nagoya



COSMOS
APPROVED



Solubility :

Oily & water dispersible

Recommended usage : 0,01 to 1%

Toxicological data:

HRIPT



SPIRULINA POWDER ET-F

Stability studies



Heat : stable up to 40 - 50°C



Light : sensible



pH : 4-8

Recommendations :

Better stability in : Oily conditions, anhydrous solution and/or dark conditions

Pre-mix in glycerin to stabilize the color

Pre-mix in “sweet envelope” will stabilize the color

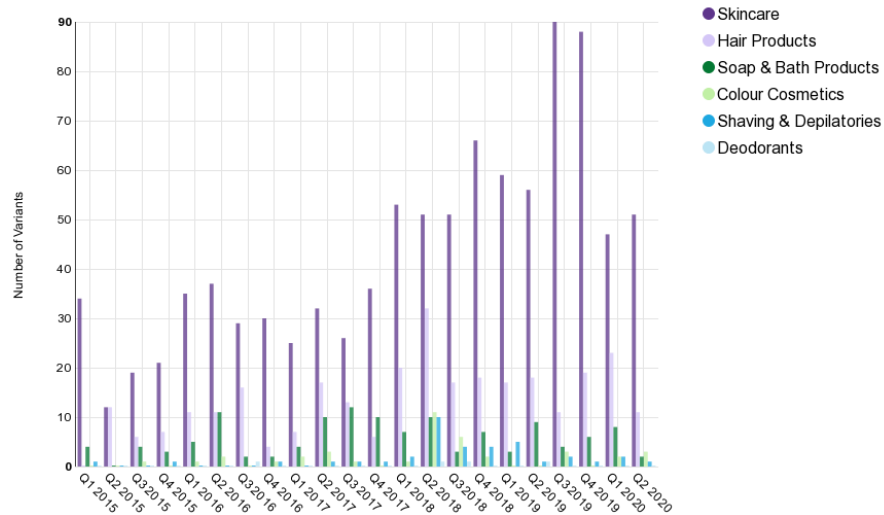
Very stable with Kahlwax 1540



Sun Chemical formula : Butter make-up remover with Spirulina ET-F

SPIRULINA POWDER ET-F

Consumers & Market insight



Spirulina Market Analysis*

Number of launches in France 2019 : 108*



France - Vichy Laboratoires - Dercos Nutrients Detox Shampoo



Romania - Viorica – corrector cream Spirulina



France -Ella Baché - Crème légère Spiruline Liftante Rides



UK – Lush – bar soap

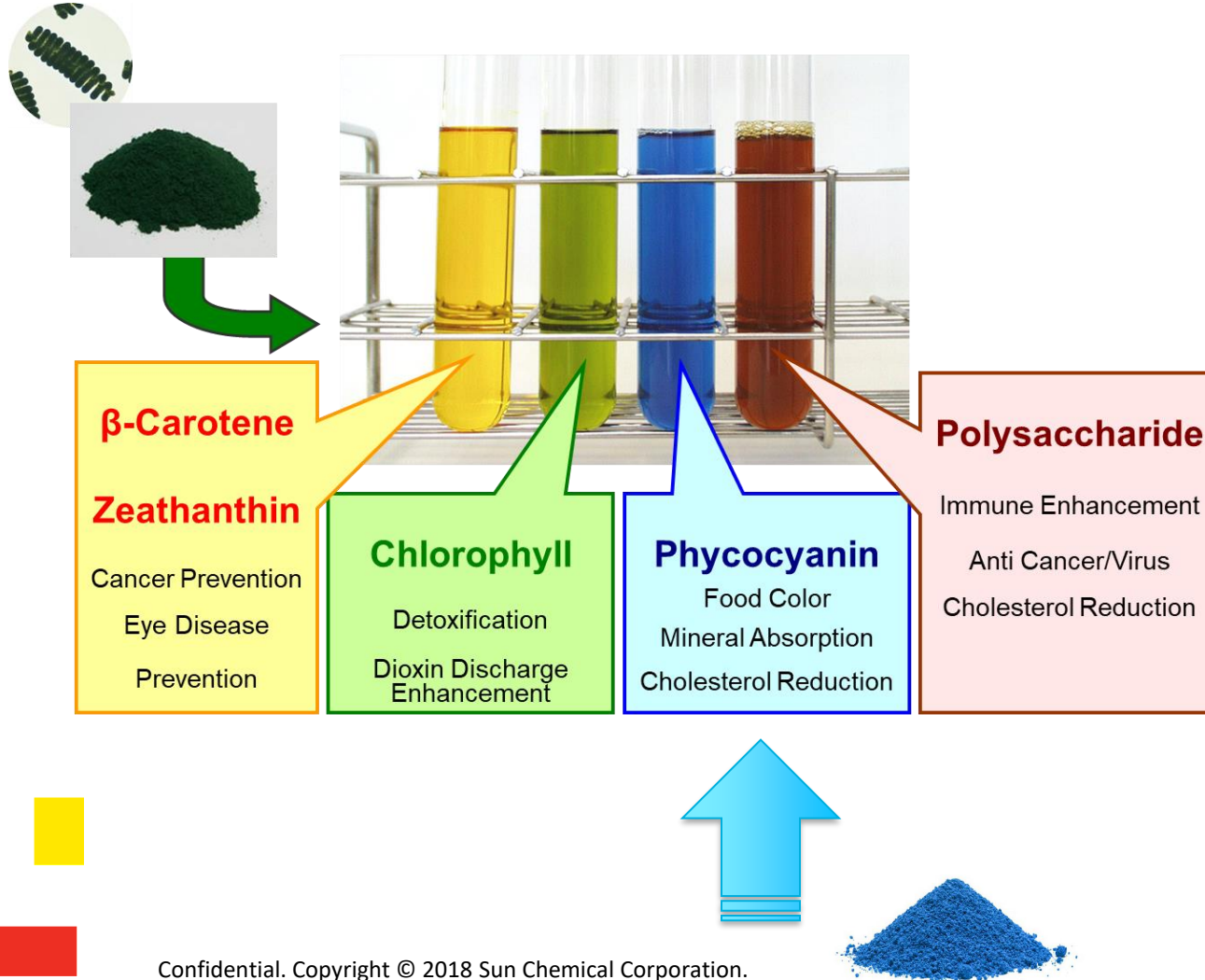
*: Mintel, May 2020

LINABLUE G1-S



LINABLUE G1-S

GREEN PROCESS PURIFICATION - Natural Phycocyanins



“Stabilized with Trehalose and Sodium citrate”



COSMOS
APPROVED

LINABLUE G1-S

WHAT ARE THE BENEFITS OF PHYCOCYANINS FOR THE SKIN ?

- Decreases inflammation*
- Stimulates the immunity*
- Detoxifies the cell*

Boost the health and vitality of your skin



* : Bibliography

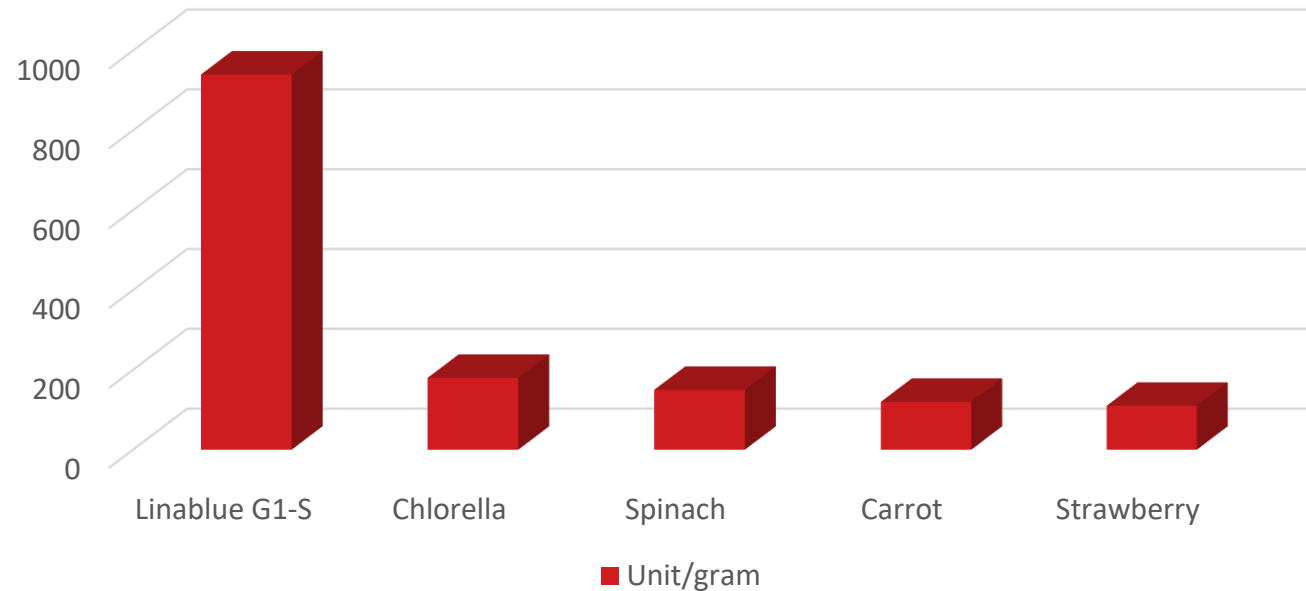
LINABLUE G1-S

WHAT ARE THE BENEFITS OF LINABLUE G1-S FOR THE SKIN ?

Super Oxide Dismutase activity



SOD activity's comparison to main natural ingredients*

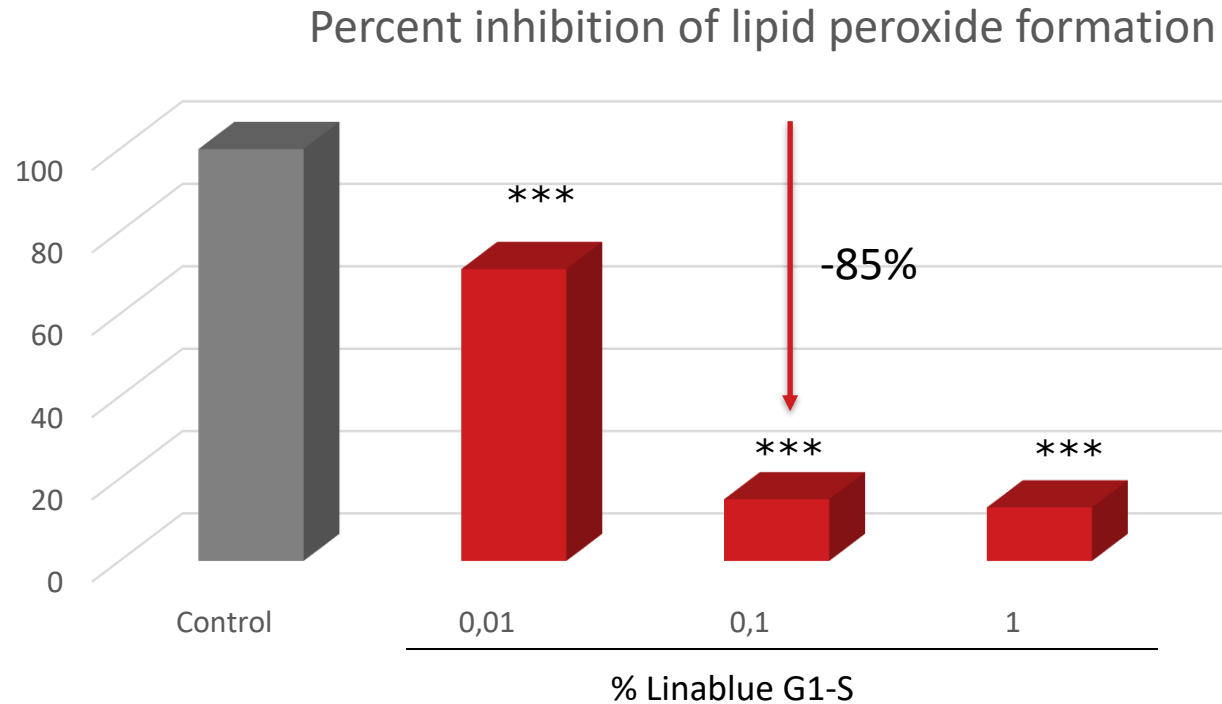


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LINABLUE G1-S

WHAT ARE THE BENEFITS OF LINABLUE G1-S FOR THE SKIN ?

Inhibition of lipid peroxidation*



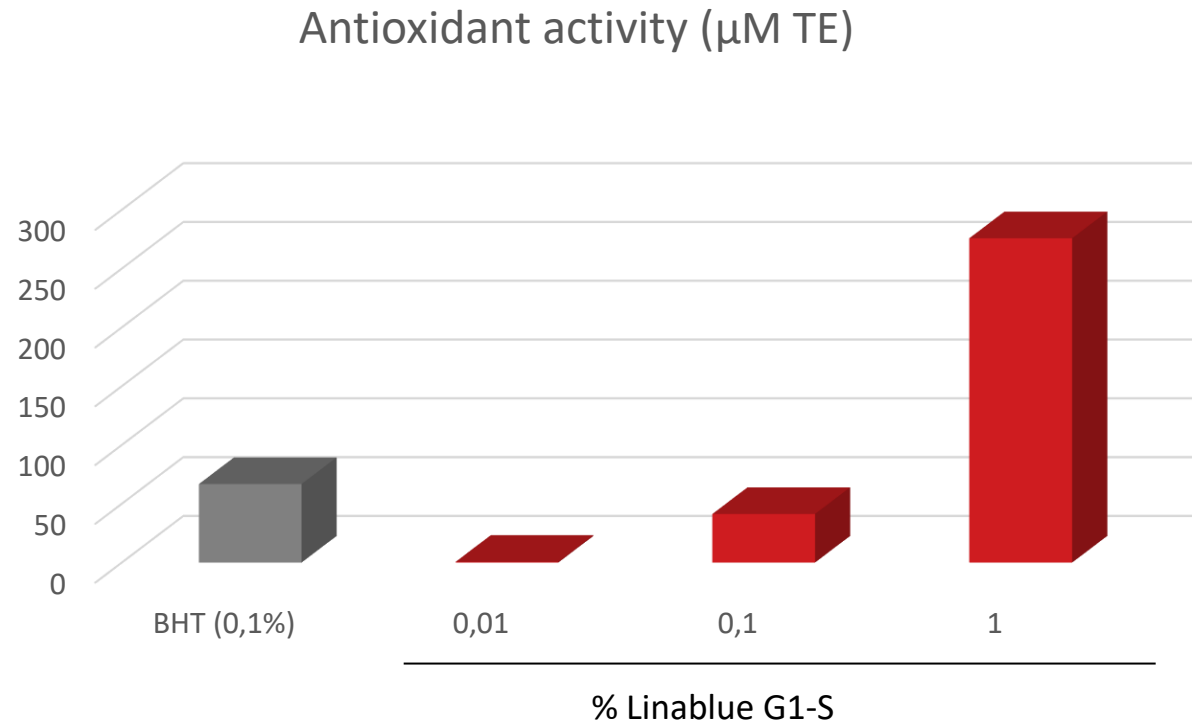
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Unpaired t-test, *** P < 0.001

LINABLUE G1-S

WHAT ARE THE BENEFITS OF LINABLUE G1-S FOR THE SKIN ?



DPPH assay*



**In tubo* – expressed in μM Trolox Equivalent

LINABLUE G1-S

Main Claims and Applications

Claims :

- > A natural vivid sky blue shade most similar to FD&C Blue 1
- > With strong antioxidant activity

Applications :

- > Make up eyeshadow, nailpolish, lip gloss, lip scrub, lip oil
- > Make up emulsion, powder, oily gel
- > Face mask
- > Soap
- > Toothpaste
- > Skin care
- > In & Out concept



Phycocyanin powder make-up



Phycocyanin face mask



In & Out

LINABLUE G1-S

Technical information

INCI name : *Spirulina Platensis Extract & Trehalose & Sodium Citrate*

Product code : ACI-0201

HS code : 3203.00

Appearance : Blue powder

Odor : Characteristic

Particle size : 40 micrometer

Raw material origin : China

Microbiological specifications :

<100 CFU/g Bacteria, Yeast and Mold

Preservation : none

Shelf life : 3 years

Compliance :

ISO 16128-2 : 100% Natural origin content, 40% Natural content

Cosmos, China and REACH

Vegan and Halal

Nagoya



Solubility :

Water soluble and oil dispersible

Recommended usage : 0,01 to 1%

Toxicological data:

HRIPT



LINABLUE G1-S

Stability studies



Heat : stable up to 40 - 50°C



Light : sensible - with antioxidation agent like ascorbic acid, its color stability can improve



pH : stable at around pH 4,5 - 8,0

Recommandations :

Better stability in acid conditions

Glycerin pre-mix and sweet envelope recommended to stabilize the color

Use dark / anhydrous condition / association with ascorbic acid

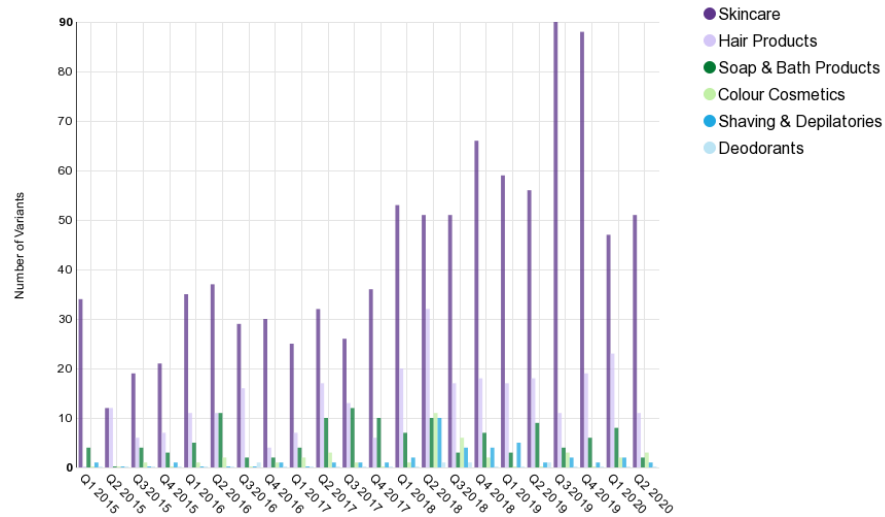
Solubility in alcohol : Precipitation occurs if used in 100% alcohol, but it can dissolve in solution with less than 20% alcohol.



Sun Chemical formulas : DIY purifying and astringent face mask, Stay Here! Hair control spray, Sparkling body gel, Body gel, Powder toothpaste, Transparent soap

LINABLUE G1-S

Consumers & Market insight



Spirulina Market Analysis*



USA - Erno Laszlo - Firmarine Cleansing Bar



France - Institut Esthederm - Intensive Spiruline cream



USA - Sephora - Spirulina mask stick



Indonesia - Viva - milk cleanser spirulina

*: Mintel, May 2020



Natural ingredient creates a natural positive vibe

