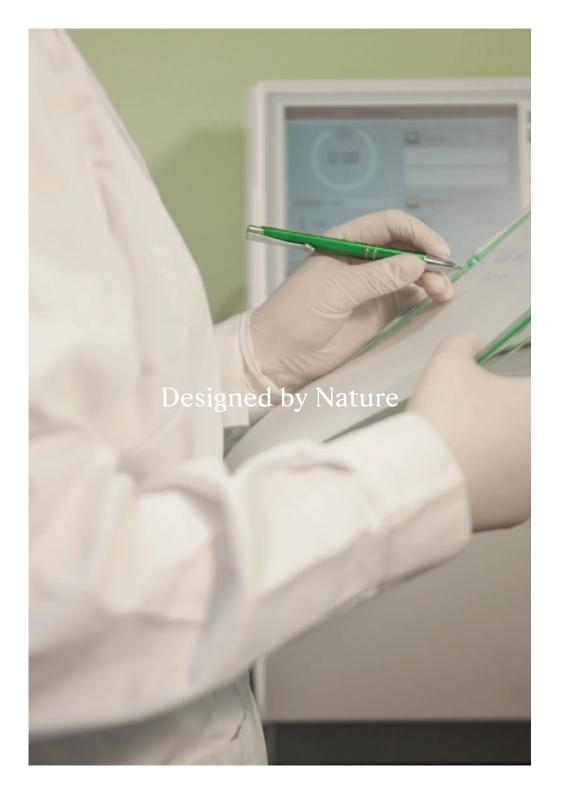
bioxan.

# Upcycled & plant-based ingredients for product enhancement

btsa.com



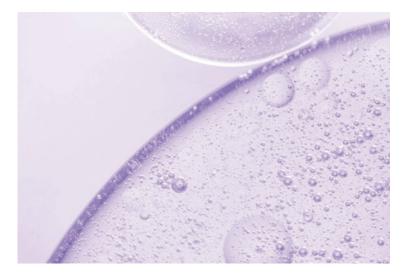
BTSA is committed to the use of natural antioxidants for cosmetics and to the development of functional active ingredients that have a positive impact on people's well-being. Since 1994, we have been developing antioxidants and active ingredients, which provide maximum protection while preserving the sensory characteristics of the formula.

Nowadays, consumers seek formulas aligned with a lifestyle which, in addition to being safe, respect the environment. That is why BTSA is committed to delivering active components for personal care.

### Products

Product	BIOXAN®	BIOXAN® Organic	BIOXAN® Blends	BIOXAN® T	BIOXAN® E
Description	Tocopherol-based natural antioxidant	Synergistic blends based on Bioxan	Synergistic blends based on Bioxan	Mixed Tocopherol concentrates	Natural Vitamin E
Composition	Tocopherol, Monoglycerides, Squalene, Sterols	Organic Tocopherol, Monoglycerides, Squalene, Sterols	Bioxan + other AOXs (Rosemary Extract, Green Tea Extract, Ascorbyl Palmitate)	Tocopherol	d-alpha Tocopherol / d-alpha Tocopheryl Acetate / d-alpha Tocopheryl Hydrogen Succinate
100% Natural	•	•	•	•	•
Organic Compliant	•	•		•	•
Soybean Base	•	•	•	•	•
Sunflower Base	•		•	•	
Non-GMO	•	•	•	•	•
Kosher	•	•	•	•	•
Halal	•	•	•	•	•
Allergen Free	•	•	•	•	•
Gluten Free	•	•	•	•	•

## Antioxidant Systems



Oxidative Rancidity is the process by which unpleasant compounds, from an organoleptic point of view, are generated in fats due to exposure to oxygen. Light, heat or humidity can accelerate this process.

We have developed a full range of antioxidants based on tocopherols that protects fats & oils by blocking free radicals, delaying the start of the oxidative process.

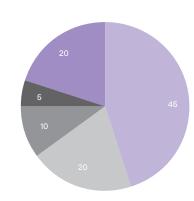
**Antioxidant Systems** 

Skincare Haircare Hand & Nailcare **Essential Oils** Fragrances Anti-Aging **Body Lotions** Lip Sticks & Balms Body Oils Spa Products

### Superior green protection

Bioxan is a tocopherol-based natural antioxidant designed exclusively by BTSA to protect cosmetic products against oxidation, increasing their shelf-life while preserving its active ingredients.

- 100% natural antioxidant
- Effective in saturated & unsaturated fats
- No organoleptic effects
- Organic Compliant
- Non-GMO Project Verified



- Tocopherols
- Vegetable Oil
- Monoglycerides
- Plant Sterols
- Squalene

#### How does Bioxan® works?

The high antioxidant power of Bioxan® is the result of the synergy between its main components such as tocopherols, monoglycerides, squalene and plant sterols, which are naturally present in the product.

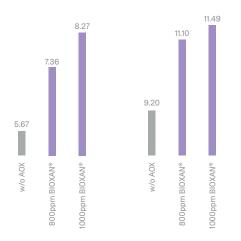
### Why choose Bioxan® over other Mixed Tocopherols Concentrates?

- Better performance
- Less cost-in-use
- Higher emulsifying capacity
- Better dispersion

Rancimat Test at 110°C Argan Oil with AOX Rancimat Test at 90°C Rosehip Oil with AOX

Rancimat Hours

Rancimat Hours



Rancimat Test at 110°C Sunflower Oil with AOX

Rancimat Hours



## The organic antioxidant power

Bioxan® Organic is the only 100% organic tocopherol-based antioxidant on the market. It is ideal for protecting cosmetic and personal care formulations from oxidation, thus preserving the activity of their ingredients. It is approved by the Ecocert & Ecocert Cosmos regulations, making Bioxan® Organic the ideal ingredient for natural products.

- Only 100% organic tocopherol-based antioxidant
- Unlimited use in organic products
- Organic index: 1 (ISO 16.128)
- Preserves the organoleptic characteristics of the product
- Ecocert & Ecocert Cosmos Certified

#### How does Bioxan® Organic work?

The high antioxidant power of Bioxan® Organic is the result of its mixed tocopherol composition. Bioxan® Organic is a natural antioxidant created to protect the fatty phase of cosmetic formulations by blocking free radicals, thus delaying the oxidative process.

#### Why Bioxan® Organic?

- European Origin
- No Organoleptic Effects
- Contributes to Sustainability Objectives

BIOXAN® ORGANIC is the first tocopherol based antioxidant certified organic under the EU Regulation 834/2007 and the National Organic Program (NOP) of the United States Department of Agriculture (USDA).

The NOP distinguishes three categories of products:

- 1. Organic
- 2. Made with Organic
- 3. Specific Organic Ingredients





Sunflower Oil at 120°C Sunflower Oil + AOX (1000ppm)



### Science from nature

Bioxan® Blends is the line of natural antioxidants that fuses Bioxan® with different ingredients to maximize the antioxidant capacity of the product. BTSA develops customized antioxidants and tailor-made blends for each type of cosmetic application and according to the needs of each formula.

- High antioxidant power
- Customized solutions
- Effective at low doses
- Does not alter the sensory characteristics of the product
- Protects the functionality of the active ingredients

#### How does Bioxan® Blends work?

Range of antioxidants that combines Bioxan® with other antioxidants to create a synergistic effect that increases the antioxidant activity of the product. Blends are available with Ascorbyl Palmitate (Vitamin C), Rosemary Extract, Green Tea Extract, etc.

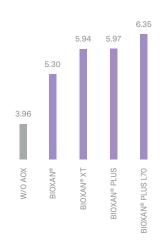
#### Why Bioxan® Blends?

No matter what the application, at BTSA we have the most suitable antioxidant for your product. Our experienced team of professionals will guide you develop the best solution for your specific needs

Blends are available with Ascorbyl Palmitate (Vitamin C), Rosemary Extract, Green Tea Extract, etc.

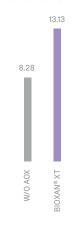
Rancimat Test at 110°C Sunflower Oil + AOX (1000ppm)

#### Rancimat Hours



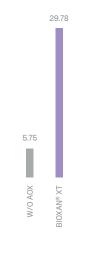
Rancimat Test at 90°C Rosehip Oil + AOX (1000ppm)

#### Rancimat Hours



Rancimat Test at 120°C Coconut Oil+ AOX (1000ppm)

#### Rancimat Hours



### Upcycled natural extracts

Bioxan® T is BTSA's product range of mixed Tocopherol concentrates, a powerful natural antioxidant used to protect cosmetic and personal care formulas against oxidation, increasing their shelf-life.

- 100% Natural Antioxidant
- European Quality
- Effective at low concentrations
- Available in different concentrations
- Ecocert & Cosmos Certified
- No organoleptic effects
- Organic Compliant
- Non-GMO Project Verified

#### How does Bioxan® T work?

Bioxan® T is a natural antioxidant approved by Ecocert & Ecocert Cosmos, recommended for use in personal care product formulations. It is a very effective product at low concentrations and has no effect on the sensoriality of the formula. Bioxan® T is available in both soy and sunflower bases, in concentrations up to 90% and 70%, respectively.

#### Why Bioxan® T?

Bioxan® T products are recommended for use saturated fats & oils and in formulas that require a 100% natural antioxidant. Bioxan® T offers high antioxidant activity, with European quality and non-GMO & Ecocert certifications.

#### Soy & Sunflower origin

Bioxan® T is available in concentrations up to 90% in soy and 70% in sunflower

Rancimat Test at 110°C Thistle Oil + AOX (1000ppm) Rancimat Test at 110°C Sunflower Oil + AOX (1000ppm)

Rancimat Hours

Rancimat Hours



## Active Ingredients



BTSA has been a leading supplier of high quality natural active ingredients for the cosmetic industry since 1994, making us the ideal partner for product enhancement.

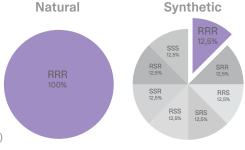
We specialize in the manufacture of natural vitamin E derived from non-genetically modified vegetable oil (Non-GMO), offering a superior alternative to synthetic vitamin E thanks to its double bioavailability.

Active Ingredients

Moisturising products
Anti-aging products
Anti-wrinkle products
Sunscreen & After Sun
Anti-Pollution products
Color Cosmetics

## Advanced natural repair & protection

- Protects against oxidation by blocking free radicals
- Increases skin hydration and improves its appearance
- Prevents the appearance of wrinkles on the skin
- Has anti-inflammatory and healing properties
- Acts as a natural barrier against UV rays and toxins
- Promotes hair growth
- Helps in the treatment of psoriasis and acne



#### **Natural vs Synthetic**

Natural Vitamin E is a single stereoisomer (called "RRR") while synthetic Vitamin E is a mixture of 8 different stereoisomers, where only one of them is the same as the natural one.

After the absorption of Vitamin E, the transport protein  $\alpha\text{-}TTP$ , which is present in the liver, prioritizes the recognition of the natural form over synthetic. Due to this, natural Vitamin E is retained better and for a longer time in the body than synthetic Vitamin E.

#### Why Bioxan® E?

Bioxan® E is BTSA's Natural Vitamin E (d-Alpha tocopherol), which is available in different concentrations, from to 500 to 1.300 International Units, as well as in ester form for products that require greater stability.

#### 35% more Bio-Available

Vitamin E Bio-Availability  $1mg \alpha$ -Tocopherol



#### **European Quality Natural Vitamin E**

Bioxan® E is used to enrich cosmetic and personal care formulas, adding value to products and following the growing trend of natural cosmetics.







## Quality Commitment

BTSA's commitment to the highest quality standards is supported by the most trusted international certificate bodies.



CARAFE

1 kg

2.5 kg















BAG 1 kg

2.5 kg

5 kg





Cosmos Approved Cosmos Certified Natrue USDA Organic EU Organic **RSPO** 

COMPANY B-Corp

ISO 9001 ISO 22000 FSSC 22000

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