



# HEALTH & PERSONAL CARE

# BERACA

## HEALTH & PERSONAL CARE

Beraca is an innovative Brazilian-based company with an international reach, focusing on the development of sustainable ingredients and technologies.

We are leading providers of natural ingredients ethically sourced from the Amazon Rainforest and other Brazilian ecosystems. Beraca's high-performance active ingredients add value to a wide number of brands operating in the cosmetics, pharmaceutical, and personal care industries worldwide.

## Beraca's Socio-Biodiversity Enhancement Program<sup>®</sup>

**Beraca** is known and valued worldwide as a reference for sustainable development due to its unique **Socio-Biodiversity Enhancement Program**<sup>®</sup> and full traceability of raw materials from Brazilian biomes, especially the Amazon Rainforest – the world's largest and most diverse rainforest.

Beraca works closely with local communities and associations to ensure eco-sustainable standards and practices in its product sourcing and production.

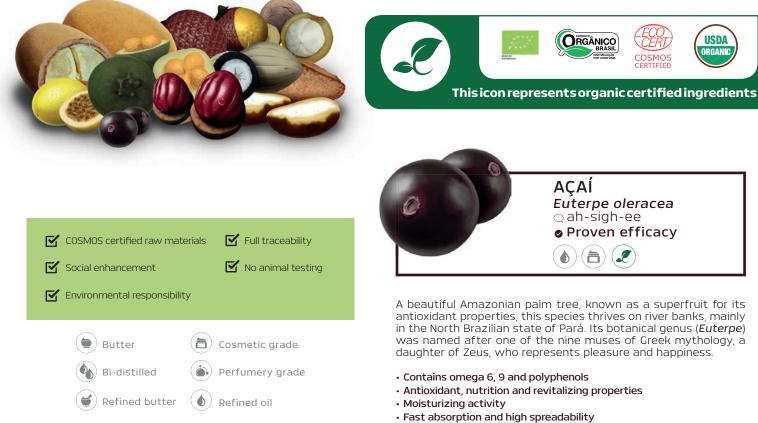
With the support of a specialized team, Beraca promotes alternative sources of income that have improved the lives of more than 2,500 families, while preserving our natural resources.

> The Program is based on the triple bottom line of economic, environmental and social balance.

This life-changing project has inspired companies from over 40 countries to use natural ingredients sustainably sourced from the Brazilian biodiversity.



**Beraca's Rain Forest Specialties** line is composed of natural vegetable oils and butters sustainably sourced from the Amazon Rainforest and other Brazilian biomes. The ingredients come from more than 100 extractive communities throughout Brazil and are manufactured to connect the Brazilian biodiversity with thousands of consumers worldwide. Through a relationship marked by transparency, traceability and innovation, Beraca contributes directly to regional development and environmental preservation.



Indicated for anti-aging products



A native dazzling tree noted for its impressive height and plank roots. Its seeds are washed ashore the river banks of the Amazonian Rainforest and are collected by locals and benefited to become a valuable active ingredient.

- Contains omega 9
- Anti-inflammatory and healing properties
- Moisturizing and insect repellent activity
- Very fast absorption and high shine
- Indicated for skin care products, especially sensitive skin

A beautiful widely-cultivated plant, endemic to tropical America and the Amazon.

Skin calming properties

- Low spreadability with very dry after feel
- · Indicated for baby skin care products, sun care and colour make-up



A palm tree that can reach over 20m (66ft) in height, with leaves that can grow up to 3m (10ft) long. It thrives mainly in the Amazon and *Cerrado* (Brazilian savanna) regions and it produces as many as 2,000 fruits a year.

- Rich in lauric acid
- Emollient agent and alternative for coconut oil
- Very low greasiness
- Indicated for skin and hair care products



Originated from eastern Amazon, the Bacuri tree occurs spontaneously in all the states of the Brazilian North Region. Bacuri is an ornamental plant and its botanical name, *Platonia insignis*, is full of meaning: *Platonia* is a homage to the Greek philosopher Plato and *insignis* means "with great significance".

- High nutritional value (Mg, Ca, Zn, vitamins D2, E and K and also tryptophan amino acid
- Promotes skin nutrition with energetic, nourishing and moisturizing properties for mature skin.
- Increases cellular energy while improving skin barrier function and promotes deep hydration
- Powdery feel and low oiliness
- Indicated for skin and scalp care products



BRAZIL NUT Bertholletia excelsa Brazil Nut Proven efficacy

One of the tallest trees in the Amazon Rainforest, it grows as high as 50m (164ft) with a large crown of long branches which lay high above the canopies of other surrounding trees. Its fruits are heavy, weighing as much as 2.5kg per shell (woody seed capsule).

- Contains selenium
- Skin barrier strengthening
- Moisturizing activity
- High greasiness and hydration after feel
- Indicated for skin care products



A robust palm tree found in different Brazilian ecosystems, especially in the *Cerrado* (Brazilian savanna) and wet tropical forests of the Amazon. Its vegetable oil is obtained from the pulp, which can also be used as an ingredient for nutritious sweets and desserts.

- Rich in omega 9 and contains carotenoids
- Antioxidant properties
- Moisturizing activity
- Low spreadability and high greasiness
- Indicated for sun care and sensitive skin care products



*Copaíba* is a tall thick-branched tree that thrives both in dry ground forests and in swampy regions. It produces a resin with a special woody scent which is extracted through a sustainable process that prevents the damaging of the plant and guarantees its continuous production.

- Contains beta-caryophyllene
- Essential oil content and anti-inflammatory properties
- Antimicrobial activity
- Fast absorption with high hydration after feel
- Indicated for skin care products

The *Theobroma* species is very abundant in the Amazon region and provides a distinctive pleasant aroma to the area. Its fruits are picked up off the forest floor during the tropical rainy season and its seeds are pressed to be transformed into a soft and moisturizing butter.

Contains stearic acid

- Skin barrier strengthening with improved of skin elasticity
- Long lasting moisturizing activity
- Balanced sensorial profile
- Indicated for skin and hair care products



A thorny palm tree, easily recognizable by its large leaves and usual short height, around 10m (30ft) maximum. It is found primarily in the Amazon Rainforest lowlands and its seeds are washed down from the Andes to the Amazonian rivers.

- Rich in lauric acid
- Hair smoothness and hydration, skin barrier strengthening
- Moisturizing activity and sensory natural alternative to silicone elastomer
- High spreadability, low tackiness with high silicone feel
- Skin and hair care products focused on new textures, with exclusive sensorial properties



*"Maracujá"* as it is known locally, is a warm-weather vine, also called the "fruit of tranquility". The beauty of its blossoms also earned it the name of "passion fruit".

- Rich in omega 6 and contains omega 9
- Reduces skin oiliness and mattifying effect properties
- Moisturizing activity
- Absorbs quickly with a dry and high hydration after feel
- Indicated for oily skin care and hair care products



An Amazonian palm tree which thrives in both dry-ground forests and swampy regions, reaching up to 25m (82ft). *Patauá* refined oil has unique characteristics such as light feel and pale color.

- Rich in omega 9
- Restores hair scalp health
- Reduces scalp desquamation after chemical damage
- High shine and hydration without greasy after feel
- Indicated for scalp and hair treatments



The *Pequi* tree is native to the *Cerrado*, known as the Brazilian savanna, and grows wild throughout all the midwest region of Brazil. *"Cerrado's* Gold", as it is known locally, the *Pequi* fruit provides a unique combination of biochemical compounds extracted by Beraca with proven efficacy and remarkable hair care activity.

- · Contains provitamin A, omega 9 and palmitic acid
- Curl retention with frizz control, build-up free and fruity smell
- Defines and keeps curls and anti-frizz action
- High slippiness and hydration after feel
- Indicated for curly hair care treatment



The *Tucumã* tree grows in the Amazon near rivers, reaching 10 to 15m high. The *Tucumã* palm produces 2 to 5 fruit clusters per year and each cluster can weight up to 30 kg, containing an average of 300 fruits. Beraca's *Tucumã* Butter is 100% natural, sustainable and an efficient alternative to silicones in formulations.

- Rich in lauric acid
- Maintains skin's moisture balance and strengthens hair fiber
- 100% natural alternative to silicone feel
- Ultra high spreadability and silicone feel with very low tackiness
- Skin and hair care products focused on new textures, with exclusive sensorial properties

A species native to the wetlands and lowlands of the Amazon region, which grows to a height of 35m (115ft). Although its wood is highly valued, it has been protected by the use of the vegetable oil, produced by the pressing of its seeds, preventing deforestation.

Contains myristic acid

- Mattifying effect with skin repairing properties
- High melting point without oily feel
- Indicated for hair, skin and men care products



Natural active ingredients' complexes for specific applications. Beraca uses scientific methodologies to research, develop, evaluate and prove the efficacy of its Active Performance Systems, providing a systematic approach to beauty through safe natural compositions.

### HAIR CARE **ORGANIC ANTI-DANDRUFF** ACTIVE SYSTEM \*Non-organic version available. Z Copaíba and Brazil Nut oil complex **Proven efficacy** ANTI - DANDRUF ACTIVE SYSTEM Recommended use level: 2.0% Before treatment After treatment Selenium 6.0 Beta-caryophyllene dandruff (un/mm<sup>2</sup>) 5.0 4.0 3.0 2.0 Quantity of 80%\* 56%\* Antiseborrheic 1.0 Anti-inflammatory 0.0 ADA 2.0% Placebo Tested product INDICATION \* Statistical significance p<0.05 when compared to the condition before treatment. Dry or oily dandruff-prone hair treatment products.

In vivo evaluation results of anti-dandruff activity of ADA active at 2.0%. The treatment had 8 applications for 2 weeks



## NATURAL HAIR ACTIVE **REVITALIZATION SYSTEM**

Açaí, Passion Fruit and Rice bran oil complex

### Proven efficacy

Recommended use level: 2.0%

Gamma-oryzanol

### PROPERTIES

 Increases vitality Film former

• Omega 6

Flavonoids

- Revitalization Intense glossiness

### INDICATION

Silicone replacement for hair products.



\* Statistical significance p<0.05 when compared to placebo

Evaluation results of hair revitalization sensory analysis of ARS Hair active at 2.0% after salon test

## ORGANIC BIO BEHENIC ACTIVE SYSTEM



\*Non-organic version available

2 Pracaxi oil

6ª

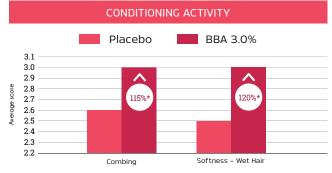
Proven efficacy

Recommended use level: 3.0%

## HAIR CARE

## PROPERTIES

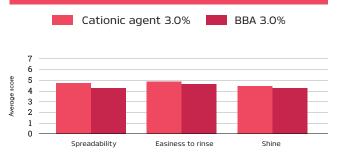
- Natural conditioning agent Compatible with cationic agents
- Silky feel for wet or dry hair Increases combability for dry or wet hair
- Increases shine
- Reduces frizz



\* Statistical significance p<0.05 compared to placebo.

Results of conditioning activity sensory analysis of BBA active at 3.0% after salon test.

EFFICACY EQUALITY



Results of efficacy equality of BBA active at 3.0% when compared to the cationic agent at 3.0% after salon test.



## SKIN CARE

## PROPERTIES

- Brightening activity • Evens the skin tone
- Improves skin firmness
- Promotes deep hydration
- Stimulates hyaluronic acid and collagen synthesis

ANTI-AGING BENEFITS

Hyaluronic acid quantification assessment

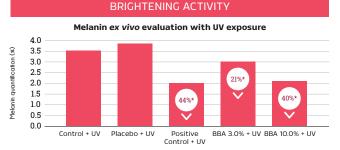
120%\*

BBA 3.0%

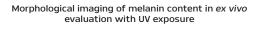
Anti-aging benefits

Control

\* Statistical significance p<0.05 when compared to UV control.



\* Statistical significance p<0.05 compared to UV control. Positive control: alpha-arbutin at 3.0%





Control



50 ....

50 µm Control

12

10

8

6

4

0

₽

uronic acid content the dermis (%)

Avalu 2

50 µm

Significant increase in the density of the collagen network.

110%\*

BBA 10.0%\*

BBA 3.0% + UV

Morphological imaging of the collagen fiber network in human skin explants subjected to BBA at 3.0%



Placeho



BBA 10.0 + UV

BBA 3.0%\*

## SKIN CARE





## NATURAL SKIN ACTIVE REVITALIZATION SYSTEM

Açaí, Passion Fruit, Rice bran and Babaçu oil complex

### Proven efficacy

Recommended use level: 2.0%

b

Flavonoids

Gamma-oryzanol

 Lauric acid • Omega 6

- Skin regeneration
- Nutrition
- Revitalization
- Moisturizing and softness micropigmentation
- Protection and maintenance of color and brightness in tattoos and eyebrow

Moisturizing creams and lotions, after-sun lotions, cellulite creams, tattoo care products and eyebrow creams and gels.

10 (AU) 8 capacitance 6 4 age 2 Ver 0 Placebo ARS Body 2.0% Tested product

\* Statistical significance p<0.05 when compared to placebo. In vivo evaluation results of skin moisturization activity, through corneometry, of ARS Body active at 2.0% after 28 days of treatment.



\* Statistical significance p<0.05 when compared to placebo. In vivo evaluation results of moisturization kinetics, through corneometry, of ARS Body active at 2.0% during 8 hours.



BEFORE

AFTER

## SKIN CARE



Flavonoids

Limonoids

## ORGANIC ANTI-ACNE ACTIVE SYSTEM

\*Non-organic version available

Andiroba, Copaíba and Açaí oil complex

### Proven efficacy

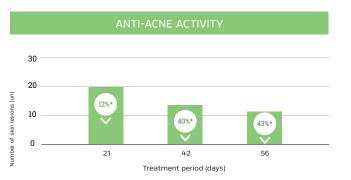
2

Recommended use level: 2.0%

Beta-caryophyllenes

- Anti-inflammatory Improves oily skin health
- Reduces the effect of acne

Products for oily and acne-prone skin.



\* Statistical significance p<0.05 compared to the condition before treatment. In vivo evaluation results of anti-acne activity of AAA active at 2.0%. The treatment had a 56 days duration and the applications occurred once a day at night.



State-of-the-art technology and versatility in terms of properties and application mark the products that are part of the Specialties line.



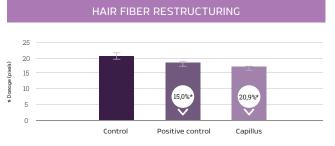
Beraca presents its new development, a result of the synergy between natural sustainable ingredients and technology for maximum performance: Capillus Pro 22. This innovative surfactant combines the benefits of an amidoamine with the benefits of natural pracaxi oil (rich in behenic acid), providing to the market a solution for hair fiber

Proven efficacy

Recommended use level: 2.0%

- Restores the hair fiber Decreases hair fiber porosity
- · Promotes volume control and aligns hair fiber Promotes intense hair shine and glossiness
- Seals hair cuticles
  - Improves hair combability

Suitable for hair care products including hair conditioners, hair treatments, hair masks, combing creams and leave-in products.



<sup>\*</sup> Statistical significance p < 0.05 compared to CONTROL.

Analysis of the ingredient's potential to restructure the hair fiber via SEM (Scanning Eletronic Microscopy) by comparing the treatment using Capillus and Positive Control (primary surfactant only) to Control (no product applied).



\* Statistical significance p <0.05 compared to POSITIVE CONTROL.

Analysis of hair shine by comparing the treatments using BTMS (Repentrimonium Methosulfate), Bench (commercial amidoamine) and Capillus to Positive Control (primary surfactant only).





Vegetable exfoliating agents 100% natural and biodegradable developed to provide a stimulating scrub action to personal care products, with gentle effect and low abrasiveness.





## AVERAGE GRANULOMETRY DISTRIBUTION: 250 µm

### PROPERTIES

- Improves blood circulation by physically stimulating the skin
- Removes dead skin cells
- Rejuvenates the skin
- Removes impurities from pores
- Promotes a soft feeling to the skin

## INDICATION

- Shower gels
- Liquid and bar soaps
- Scalp care products
- Facial cleansing
- $\boldsymbol{\cdot}$  Hand and feet preparations
- Skin massage products

## BIODEGRADABLE SCRUBS SUSTAINABLY HARVESTED. 100% NATURAL ALTERNATIVE TO POLYETHYLENE BEADS.



Liquid vegetable extract from the Brazilian biodiversity.





Recommended use level: 2% – 5%

### PROPERTIES

### INDICATION

- Contains anthocyanins
- Antioxidant active

- Body and facial products
- Hair products



**BeraMinerals** Resulting from the transformation of rock occurring over many millennia, mineral clays from the Brazilian biodiversity offer wide benefits for hair and skin. Therefore, Beraca has created the BeraMinerals, a product line that includes two high potential compounds for cosmetics industry.

## BERACLAYS: ACTIVE MINERAL COLORS

Beraca's line of Beraclays offers a unique variety of colors and distinct cosmetic benefits obtained through sustainable production. It is composed of a wide range of natural color shades containing no artificial dyes or pigments. The colors are variations of minerals and microminerals offered by nature.

PROPERTIES

- Light & heat stable colors
- No added dyes
- Improves emulsion rheologyCompletely non-irritating

Masks

Bar soaps

Color cosmetics

 Enhances sensory feel in emulsions

Exfoliating products

Anti-aging creams

"Low-poo" shampoos

- Reduces skin oiliness without dehydrating the skin
- Improves maintenance of skin's moisture balance

- INDICATION
  - Anti-pollution products
  - Firming body creams
  - BB creams

- Color conditioners
- Dry shampoos
- Deodorants
- Sun care products

## AVERAGE GRANULOMETRY DISTRIBUTION: 15-50 µm



## BERACLAY CRUDE

Anti-aging Proven efficacy



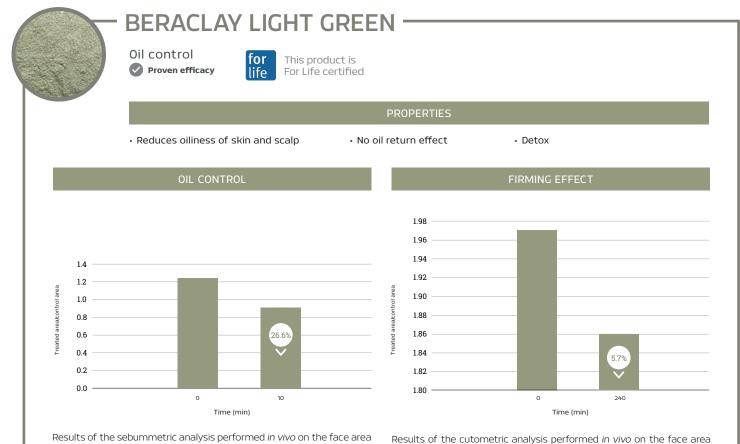
This product is For Life certified



Results of the in vivo cutometric analysis performed in the face area with Beraclay Crude at 1.6g/ml with 20 minutes of application. The measurements were performed before the mask was applied (0 min), immediately after removal of the mask (10 min), after 2 hours (120 min) and after 4 hours of mask removal (240 min). The higher the tensor effect, the lower the ratio between the evaluated areas.

41.6% 240 120 Time (min)

Results of the in vivo cutometric analysis performed in the face area with Beraclay Crude at 1.6g/ml with 10 minutes of application. The measurements were performed before the mask was applied (0 min), immediately after removal of the mask (10 min), after 2 hours (120 min) and after 4 hours of mask removal (240 min). The higher the elasticity, the higher the ratio between the evaluated areas.



with Beraclay Light Green at 1.6g/ml with 10 minutes of application. The measurements were performed before the mask application (O min) and after 10 minutes of treatment (10 min). The higher the anti-oil activity, the lower the ratio between the evaluated areas.

with Beraclay Light Green at 1.6g/ml with 20 minutes of application. The measurements were performed before the application of the mask (0 min) and after 4 hours of the mask removal (240 min). The higher the tensor effect, the lower the ratio between the evaluated areas

## **BERACLAY RED** -

for

life

Anti-aging Proven efficacy

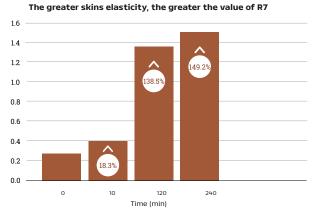
PROPERTIES Skin firming Detox • High color payoff Anti-aging Antioxidant ELASTICITY **TENSOR EFFECT** The greater the tensor effect, the lower the value of RO 1.6 1.4 14 1.2 149.2% 1.2 38.5 10 1.0 1.6% 0.8 0.8 0.6 06 30.49 37.8% 0.4 0.4 0.2 0.2 0.0 0.0 0 10 120 240 о 10 120 240

This product is

For Life certified

Results of the in vivo cutometric analysis performed in the face area with Beraclay Red at 1.6g/ml with 20 minutes of application. The measurements were performed before the mask was applied (0 min), immediately after removal of the mask (20 min), after 2 hours (120 min) and after 4 hours of mask removal (240 min). The higher the tensor effect, the lower the ratio between the evaluated areas.

Time (min)



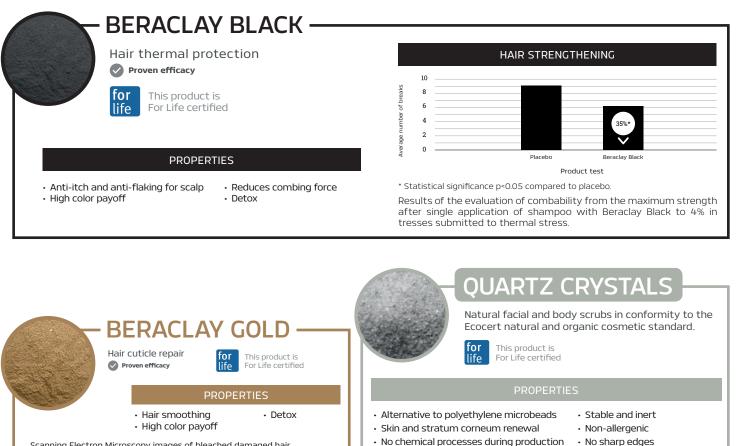
Results of the in vivo cutometric analysis performed in the face area with Beraclay Red at 1.6g/ml with 20 minutes of application. The measurements were performed before the mask was applied (0 min), immediately after removal (10 min), after 2 hours from removal (120 min) and after 4 hours of mask removal (240 min). The higher the elasticity, the higher the ratio between the evaluated areas.

No preservatives

AVERAGE GRANULOMETRY DISTRIBUTION

+ Facial quartz crystals – 100  $\mu m$  + Body quartz crystals – 600  $\mu m$ 

No gamma-irradiation



• No pigments or colorants

100% natural

Scanning Electron Microscopy images of bleached damaged hair

Improves hair cuticle



1400 x 10kv 10 µ



# Beraca's integrated service

A innovative solution that provides our clients with streamlined access to ingredients from the Brazilian biodiversity

Reinforcing our position as pioneers in supplying sustainable ingredients sourced from the Brazilian biodiversity, as well as delivering consistent value to our customers, we present our new Integrated Service.



As many countries have created local rules regarding the use of their genetic heritage and benefit sharing with the purpose of guaranteeing the sustainable use of natural resources and the consequent perpetuation of the species, we created this streamlined methodology to support our clients in the process of complying with the **BIODIVERSITY LAW.** 



The Integrated Service based on four simple steps:



Determining which product – sourced from the Brazilian biodiversity – in Beraca's portfolio will be used by the client in their cosmetic or personal care formulations.



Beraca provides, in a transparent manner, the product's individual registration number, as well as information on the traceability of its production chain. These details are required for the registration of the finished product at the National System for Management of Genetic Heritage and Associated Traditional Knowledge (SISGEN). Prior to the passing of the new Biodiversity Legal Framework, Beraca had already provided our clients with transparent information regarding the traceability of our products by acting as a real bridge between global cosmetic companies and local supplying communities.

This bond will continue to be a critical part of the process, as well as the analysis of needs and challenges together with these communities in order to establish benefit-sharing projects that can be selected and supported by our clients according to their strategic positioning. For this stage of the process, Beraca has the support of the Beraca Institute for Sociobiodiversity Enhancement, a not-for-profit organization that can work together with our clients in the planning, execution and reporting of the results of tailored socioenvironmental projects.



The compliance stage of the process, conducted with the Brazilian Genetic Heritage Management Council (CGEN), involves the collection of information on the ingredients and species in use, the establishment of a strategy, the access registration and the reporting of results achieved through the benefit-sharing project. Beraca will offer an additional, optional consultancy service to our clients aiming to speed and optimize this process by centralizing information and responsibilities.

The **INTEGRATED SERVICE** is a special opportunity for our clients to create more value for their customers while supporting benefit-sharing projects with positive impact measurement, traceability and marketing appeals.

To learn more about the **INTEGRATED SERVICE** and how we can best support your business, please arrange a meeting through our sales department.

> Vi fo

> > nstituto Beraca

Visit **www.beraca.com/sustentabilidade** for more details.

Get more information at: **institutoberaca.org** 



As an additional service, Beraca may conduct product registration and reporting to the competent bodies, in accordance with the Brazilian law.



In case the client chooses to share benefits with the supplying communities through environmental and/or socioeconomic development projects, they will find several options of initiatives to support through Beraca Institute's online platform.







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