

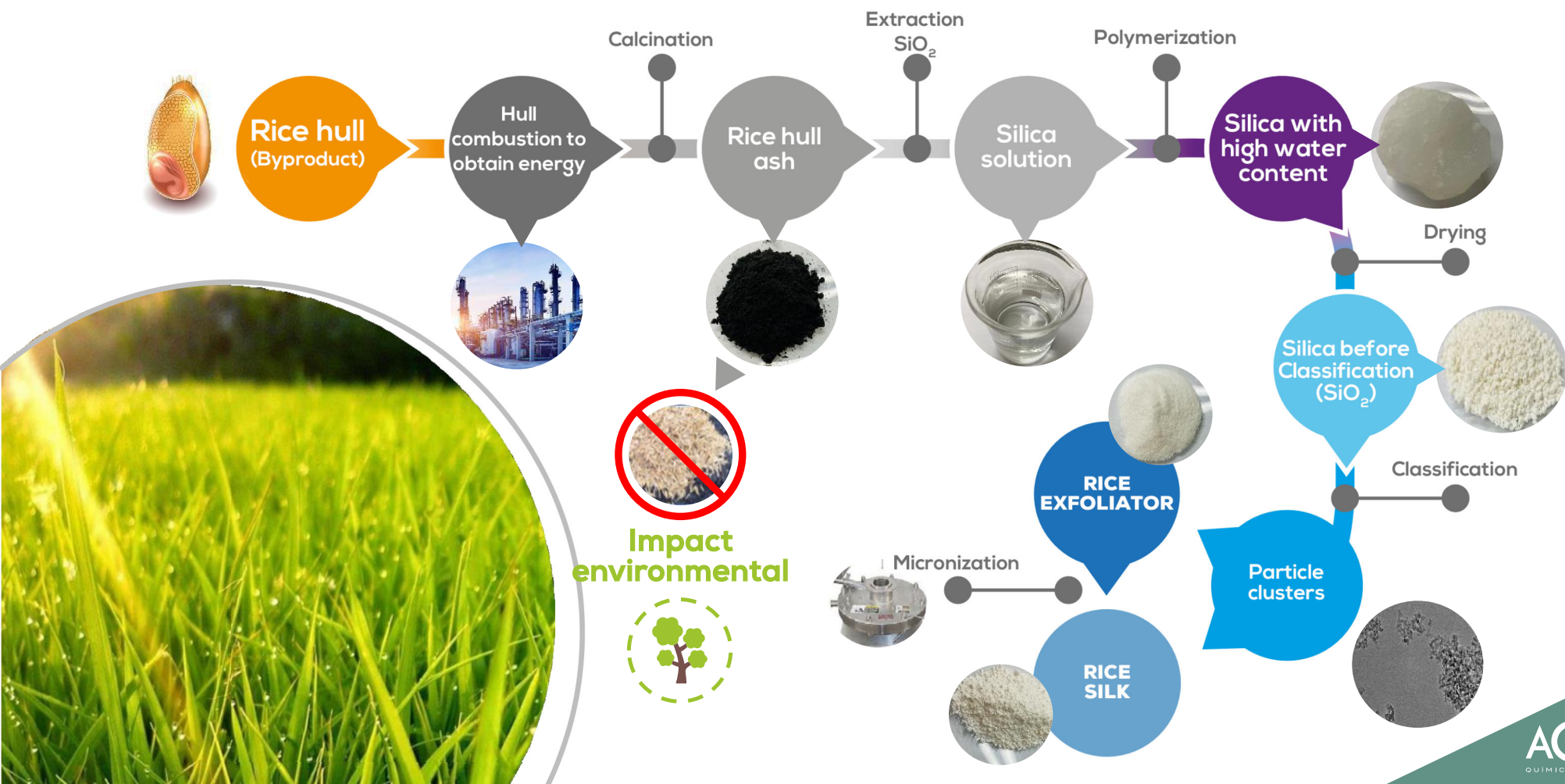
# Rice Silk

*Rice Silk | Natural Texturizing Agent*



Ultra-fine powder of 100% plant origin, derived from rice, rich in silicon dioxide and obtained through state-of-the-art micronization technology.

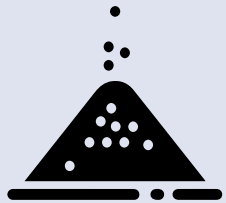
# Environmentally friendly obtainment processes



# Micronization Technology

## Ultrafine Micronization (Air Jet Mills)

Micronization by compressed air mills (Air Jet Mills) is an ultrafine autogenous grinding process that happens due to the shock between particles of the product itself. Upon receiving the energy of compressed air, it gains speeds of up to 500m/s.



***With the shock, particles decrease in size until they reach the desired granulometry.***

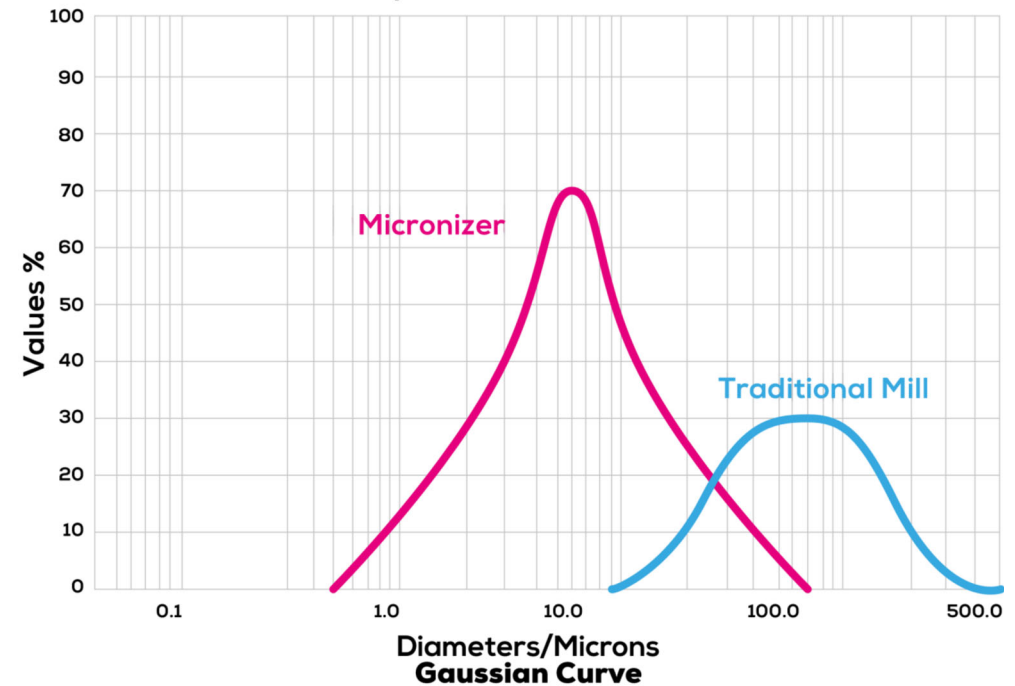




# Benefits

- It achieves smaller particle sizes than other types of mills, and can reach 1 micro in average diameter.
- More homogeneous particle size
- Low process temperature
- No mechanical elements, no contamination of metals, lubricants, oils, etc.

Efficiency | Micronizer-traditional mill



# Advantages

## PRODUCT

Raised surface area,  
excellent coverage

High surface adhesion

Homogenous particles,  
without segregation

Low clumping due to its  
optimized geometry, with  
spherical trend

# Application Test - Oil Absorption Capacity

Evaluation of the oil absorbing capacity of Rice Silk in comparison with other powders commonly used for this purpose.

## METHODOLOGY

1g of the powders to be evaluated were weighed separately (Rice Silk; Methyl Methacrylate Crosspolymer - PMMA; Nylon-12; bamboo powder - *Bambusa Arundianacea Stem Extract*) and incorporated, gradually, capric and caprylic acid triglyceride until the saturation of the powders. The amount of emollient that each powder was able to absorb was weighed, showing the following results:

Product	Chemical classification	Granulometry	Amount of oil	Absorption Capacity
Rice Silk	Silica	5-10 $\mu$ m	2,00g	200%
Methyl Methacrylate Crosspolymer (PMMA)	Plastic	5-15 $\mu$ m	0,56g	56%
Nylon 12	Plastic	20 $\mu$ m	0,80g	80%
Bamboo powder ( <i>Bambusa Arundianacea Stem Extract</i> )	Silica	15 $\mu$ m	1,60g	160%

Smaller particle size

Greater oil absorption capacity

**Rice Silk presented an oil absorption capacity superior to the competing products!!**



# Clinical Test

## SEBUMETRY

Evaluation of the effectiveness of Rice Silk in reducing oiliness in volunteers with mixed and oily skins



## Methodology

Application of a gel with 5% Rice Silk on 21 volunteers (men and women), aged 22 to 35, phototypes II to IV, with mixed to oily skin. Evaluation was carried out in the “zone T” by the MPA 580 equipment with Sebometer probe, for 5 hours (T0, T1, T2, T3, T5).

# Resultados

## SEBUMETRY

Rice Silk reduced the oiliness of the skin:

- 70% after 1 hour;
- 53% after 2 hours;
- 37% after 3 hours;
- 25% after 5 hours;

- When compared to the initial condition of the skin.



Rice Silk significantly improves (reduces) skin oiliness up to 5 hours after application!!



# Clinical test - Self-assessment

## PERCEIVED EFFECTIVENESS

Evaluation of the oiliness control and sensory attributes by users of dermocosmetics



## Methodology:

Gel application with 5% Rice Silk, after 30 to 60 minutes of cleaning with neutral soap, in 33 volunteers (women and men), from 19 to 35 years old, phototypes II to IV, with mixed to oily skin. Evaluation of cosmetic perception was performed through a questionnaire, one hour after application

# Results

## Perceived Effectiveness

The volunteers noticed an oiliness control, an improvement in texture and a sensation of clean, silky skin with a dry touch!

OILINESS CONTROL

97%

SKIN TEXTURE IMPROVED

88%

CLEAN SKIN SENSATION

97%

DRY TOUCH SENSATION

97%

SILKY SKIN SENSATION

88%



Nuxe

## Sun Melting Cream SPF 50

*This facial sunscreen SPF50 with Sun and Water Flowers, protects cells from ageing and helps you achieve a perfect tan. Ideal for fair skins and sensitive areas (face, neckline), this facial sunscreen high protection limits the appearance of dark spots.*

Uploaded by: ghazalgh on 10/15/2018



e.l.f.

## ELF+ MATTE OIL-CONTROL PRIMER

*This clay-infused primer helps control oil for a lasting mattified complexion. The lightweight formula helps blur the appearance of pores, while combating excess oils with Kaolin Clay and Tea Tree.*

Uploaded by: apoorva517 on 09/15/2020



Kiko

## Unexpected Paradise Loose Powder

*Loose powder for perfect summer makeup.*

Uploaded by: liske on 07/27/2020



Sukin

## Oil Balancing Mattifying Facial Moisturiser

*Battling that 3pm shine? Our Oil Balancing Moisturiser will be your new holy grail, It is enriched with Rice Powder to mattify the face, and prevents an oily base throughout* [\[more\]](#)

Uploaded by: cc618 on 09/04/2019



# Rice Silk

## PLANT SILICA

- Sustainable plant origin
- Alternative to synthetic silica
- High purity
- Homogenous particle size

## PROPERTIES

- Improves the spreadability and silkiness of emulsions
- Can help in the stability of formulations with high oil content
- Promotes increased coverage (low  $\text{g}/\text{cm}^2$  value)

## BENEFITS

- Sensory agent that offers a smooth & silky feel
- High capacity to absorb excessive skin oiliness
- Delivers a matte effect, reducing the shiny skin aspect



# Rice Silk

INCI Name: *Oryza Sativa (Rice) Hull Powder*

Aspect (25°C): Soft-textured fine powder

Color: White to light beige

Particle size: 0.1-30 µm

Preservatives: No preservatives added

Indicated use: 0.5 to 5%

**Applications:** Moisturizing emulsions, Makeup, Sunscreens, Dry shampoos, Talc, Deodorants, Soaps. Also indicated for oily and acneic skin care.



# Rice Line

**Sustainable Rice derivatives**  
**Natural exfoliating and texturizing agents**

**AQIA**  
QUÍMICA INOVATIVA