celluloScrub™

The ultimate
PE beads alternative
for cosmetics

100%
RENEWABLE
BIODEGRADABLE

in-cosmetics® Green ingredient Award 2015

LESSONIA
cosmetics + ingredients

100%
RENEWABLE
BIODEGRADABLE

CelluloScrub™ is a white scrub that provides the same high performance of polyethylene (PE) beads.

CelluloScrub™, coming from wood pulp, is a modified cellulose making it a real renewable and biodegradable resource for the personal care industry. It has no impact on the lands overexploitation. The cellulose which is used to make it comes from certified and sustainable forests.

CelluloScrub™ is recognized as biodegradable within the scientific community. Its degradation by microorganism has been extensively studied in a wide variety of environments including waste water treatment facilities.

Just like a leaf on the ground...

celluloScrub™

High performances in comparaison with PE beads

CelluloScrub™ has the same characteristics of performance as the Polyethylene used for scrubbing purposes.

- Same white color
- Same color stability
- Same abrasiveness and abrasiveness stability
- Same suspension capacities due to same density.

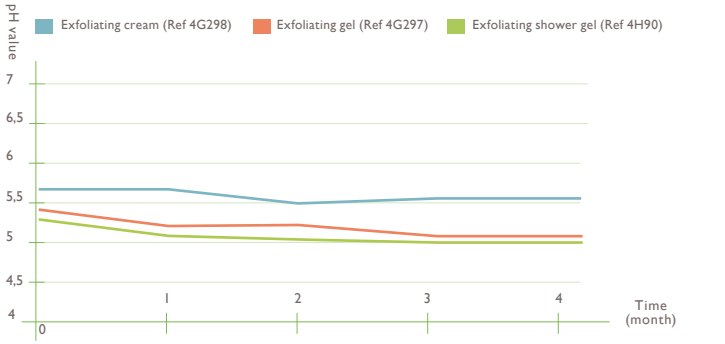
colour stability
abrasiveness
suspension capacity
skin tolerance

STABILITY TEST

Stability studies made with CelluloScrub™ show an optimal stability in any cosmetic products. One of the most important benefits of CelluloScrub™ is its very low impact on the pH value of the product. With CelluloScrub™, pH may not be reduced more than 0,1 to 0,2 when the pH is more impacted with other polymers like polylactic acid.

	CONDITIONS	Abrasiveness	Odour	Colour
Exfoliating Shower gel (Ref: 4H90)	Under light	✓	✓	✓
	Away from light	✓	✓	✓
	Aging oven	✓	✓	✓
Exfoliating gel (Ref : 4G297)	Under light	✓	✓	✓
	Away from light	✓	✓	✓
	Aging oven	✓	✓	✓
Exfoliating cream (Ref : 4G298)	Under light	✓	✓	✓
	Away from light	✓	✓	✓
	Aging oven	✓	✓	✓

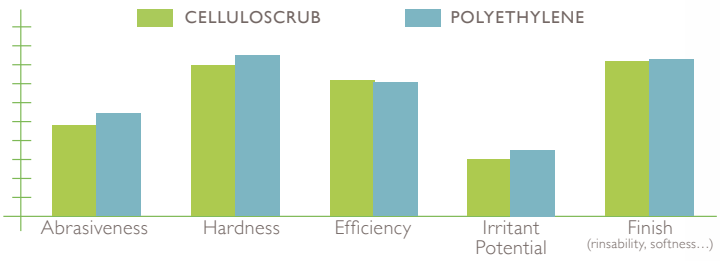
CELLULOSCRUB™ STABILITY TESTS



PH STABILITY OF COSMETIC PRODUCTS FORMULATED WITH CELLULOSCRUB™

SENSORY TEST

The following test had been made with 12 consumers using an exfoliating cream made with PE beads or CelluloScrub™. The consumers found that differences between the two creams were very narrow.



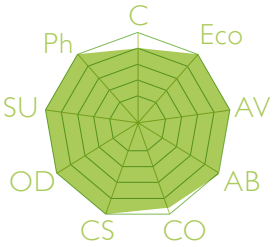
SENSORY ANALYSIS ON CELLULOSCRUB™. COMPARAISON WITH PE BEADS

celluloScrub™

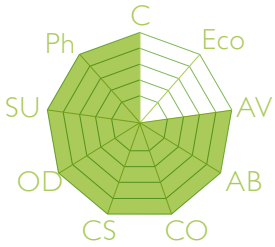
The best alternative to Polyethylene

The following study comparing 9 naturals exfoliating ingredients with PE shows that CelluloScrub™ presents the best characteristics of performance.

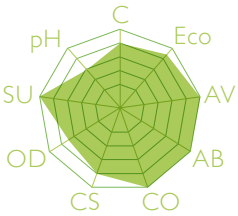
celluloScrub™



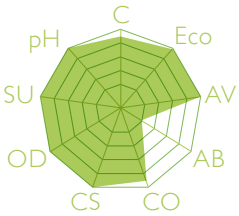
POLYETHYLENE



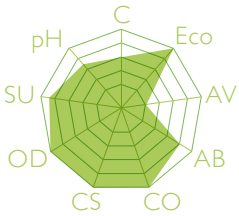
POLYLACTIC ACID



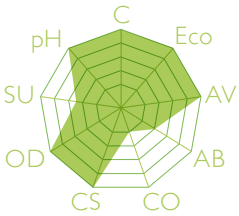
MICROCRYSTALINE CELLULOSE



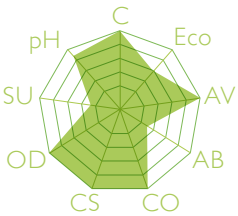
BAMBOO



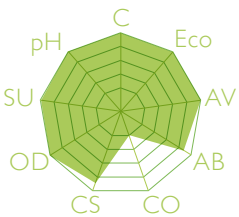
PUMICE



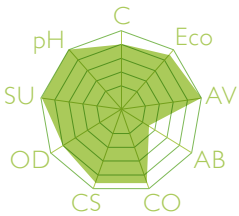
CORINDON



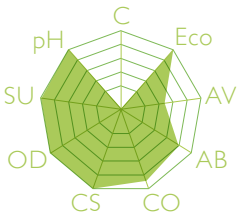
APRICOT



RICE



WAXES



C: Cost effective - Eco: Ecofriendly - AV: Availability - AB: Abrasivness - CO: Colour - CS: Colour stability - OD: Odour - SU: Suspension capacity - pH: pH stability

Uses

CelluloScrub™ can be used in any kind of personal care products for exfoliation purposes. It remains stable over time and does not interfere with the color and the pH of the product. CelluloScrub™ has an excellent skin tolerance.

CelluloScrub™ is available in 4 grades

- CelluloScrub™ 1000
- CelluloScrub™ 500
- CelluloScrub™ 300
- CelluloScrub™ XLS

INCI : Cellulose acetate.
Dose: 5 to 10 %
Packaging: 20 kg
Regulation: it is allowed without any restrictions in EU, China, ASEAN, Australia, Brazil, Canada, Japan, USA and Switzerland.

LESSONIA - Croas ar Neizic - 29800 Saint Thonan - FRANCE
Tél. 33 (0)2 98 07 23 65 - Fax 33 (0)2 98 07 23 66 - info@lessonia.com - www.lessonia.com