



COSMOS
APPROVED

CENTELLANE®: A LIQUID FORM OF CENTELLA ASIATICA EXTRACT

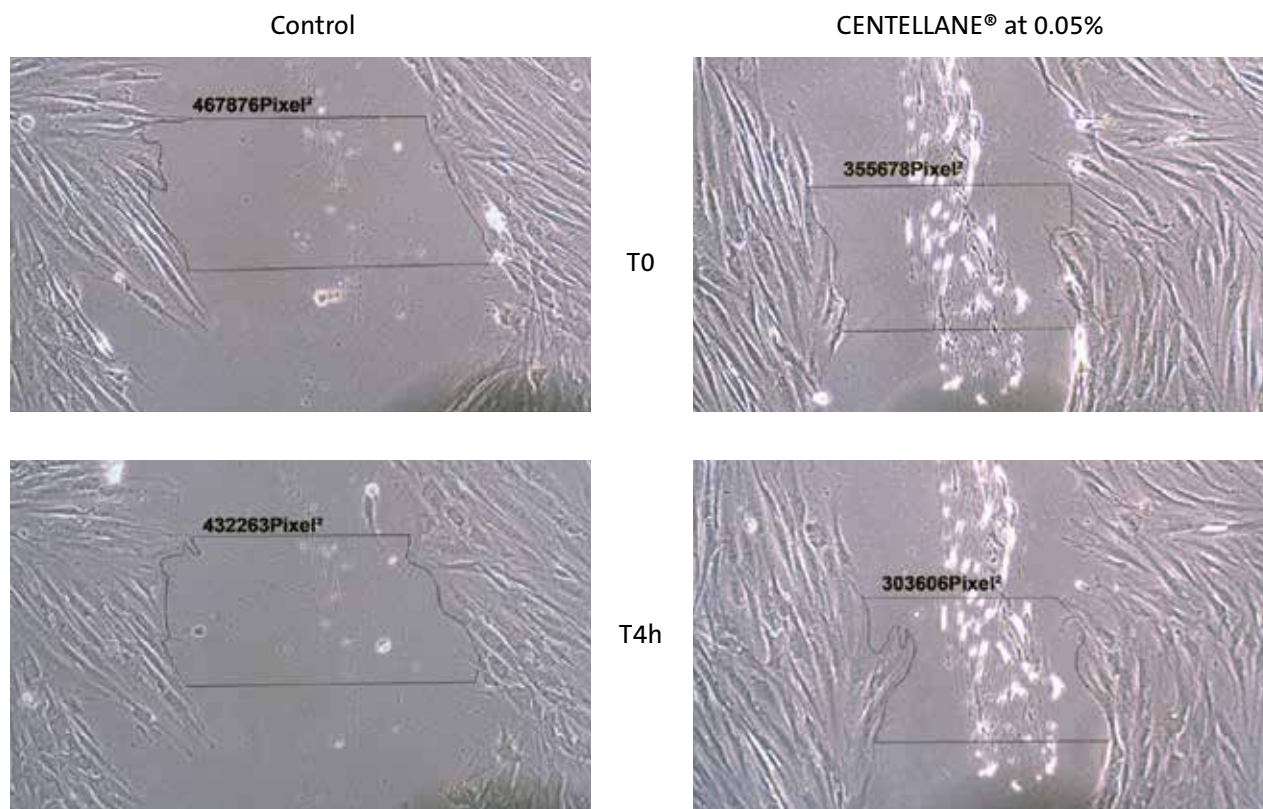
Anti-aging - Soothing - Hydration - Skin restructuring - Anti-wrinkles - Detoxification



STARTING FROM OUR ORGANIC CENTELLA ASIATICA EXTRACT, GREENPHARMA PROPOSES A LIQUID FORM OF CENTELLA ASIATICA EXTRACT EASY TO FORMULATE, STABLE AND TITRATED AT 1% IN TRITERPENES.

Wound healing property of CENTELLANE®

CENTELLANE® 0.05% SIGNIFICANTLY INCREASES THE ACTIVATION OF THE WOUND REPAIR BY 90% COMPARED TO THE CONTROL, ONLY 4 HOURS AFTER TREATMENT**

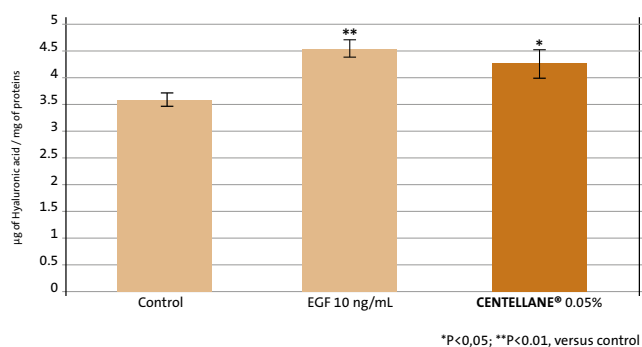


****p<0.01 versus Control**

Model: Scratch test method on normal human fibroblasts with or without CENTELLANE® 0.05%.
Evaluation of wound surfaces with AxioVision software allowing the evaluation of the recolonization.

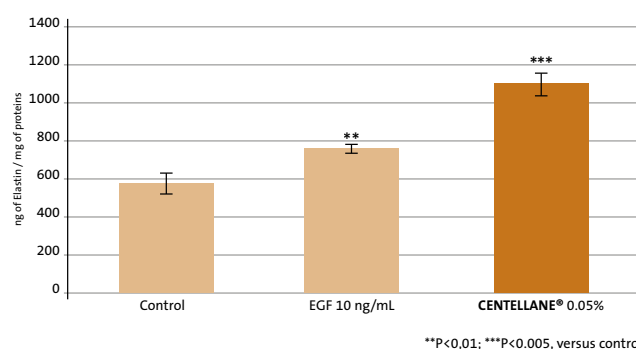
Effect of CENTELLANE® on the extracellular matrix

CENTELLANE® 0.05% SIGNIFICANTLY INCREASES HYALURONIC ACID LEVEL BY 16%



Model: On normal human fibroblasts after 48 hours treatment with CENTELLANE® 0.05%. Hyaluronic acid quantification was performed using ELISA method.

CENTELLANE® 0.05% SIGNIFICANTLY INCREASES ELASTIN LEVEL BY 89%



Model: On normal human fibroblasts after 48 hours treatment with CENTELLANE® 0.05%. Elastin quantification was performed using ELISA method.

Specification sheet

PRODUCT INFORMATION

Name	CENTELLANE®
Reference	GPG000020
INCI name	PROPANEDIOL, AQUA, CENTELLA ASIATICA EXTRACT
EC N°	207-997-3, 231-791-2, 283-640-5
CAS N°	504-63-2, 7732-18-5, 84696-21-9
Content	Triterpenoids: Asiaticoside, Madecassoside, Asiatic acid, Madecassic acid
Storage	in a dark, dry and fresh place



**COSMOS
APPROVED**

CONTENT

Ingredient	Content	EC # / CAS #	Comment
Organic Centella asiatica extract	≈ 4%	283-640-5 / 84696-21-9	COSMOS certified 100% Org PPAI*
PROPANEDIOL	≈ 86.4%	207-997-3 / 504-63-2	COSMOS approved
WATER	≈ 9.6%	231-791-2 / 7732-18-5	-

*CENTELLANE® can not be counted as organic in the final formula

TECHNICAL DATA

	TECHNIQUE	SPECIFICATION
Triterpenoids	HPLC	NLT 1%
Appearance	Visual	Yellow to orange liquid
Odour	Organoleptic	Low
pH	pH meter	To be defined
Dry matter	To be defined	To be defined
Total plate count	NF ISO 21149	≤ 100 CFU/g
Yeast & Mold	NF EN ISO 16212	≤ 100 CFU/g
<i>Escherichia coli</i>	NF ISO 21150	Absence in 1g
<i>Staphylococcus aureus</i>	NF ISO 22718	Absence in 1g
<i>Pseudomonas aeruginosa</i>	NF ISO 22717	Absence in 1g
<i>Candida albicans</i>	NF ISO 18416	Absence in 1g



CENTELLANE®: A LIQUID FORM OF *CENTELLA ASIATICA* EXTRACT.

THE ORIGIN OF THE PRODUCT

Centella asiatica (L.) Urb. also known as Gotu kola, belongs to the *Apiaceae* family. This plant grows in temperate and tropical swampy areas in many world regions. This is an important medicinal herb used both in traditional pharmacopeia and in modern medicine.

Many scientific studies demonstrated that the biological activities attributed

to *Centella* are due to the presence of a variety of pentacyclic triterpenoids also called **centellosides**, represented by four major compounds: asiaticoside, madecassoside and their genins. Scientific studies also demonstrated a **significant variation in content** of centellosides. These variations are governed by a combination of parameters such as the **climate**, the **seasons of harvest** and the **genotype**.

Identifying a good sourcing in terms of quality, traceability, reproducibility, sustainability and high level in bioactives is a key element to develop a product with a strong biological activity.

In order to comply with all these criteria, the aerial part

of organic *Centella asiatica* harvested in **Madagascar** was used to produce our **organic *Centella asiatica* extract**.

The final extract is obtained after alcoholic maceration, filtration and drying of the crushed leaves. Organic alcohol was used to have a 100 % organic product.

CENTELLANE® results from solubilization of this 100% organic product in propanediol, which is the only solvent able to guarantee the **stability** of triperpenes.

Thanks to its solubility in water at the recommended use level, CENTELLANE® has the great advantage to being **easy to formulate** in any kind of formulations containing water.



**COSMOS
APPROVED**



DERIVATIVE PRODUCT: CENTELLANE®

Suggested content in final product:
from **0.5% to 1%**

Technical data

INCI name: *Propanediol, Aqua, Centella asiatica extract*

China: approved

COSMOS: approved

Formulation: soluble in water at the recommended pourcentage of use. In emulsion, CENTELLANE® can be added into the aqueous phase or at the end of the process.

Applications: Anti-aging skin care, collagen booster, repair formulations, Anti stretch marks products, anti-pollution skin care.

