



MUCOSAVE™ CG

MUCOADHESIVE BARRIER BLEND FOR SENSITIVE MUCOSAE PROTECTION



INCI NAME: Opuntia ficus-indica stem extract,
Olea europea (Olive) leaf extract, Maltodextrin

MUCOSAVE™ CG is a blend of two plant extracts combining the strong physical protection of Opuntia bioadhesive polysaccharides with the soothing effect of olive leaf biophenols.

STANDARDIZATION: Polyphenols as Luteolin
7-O-Glucoside and Polysaccharides

PARTICULAR SIGN: Natural Origin Index
(ISO 16128):1

Sustainable ingredient from co-products with
a circular economy process

SENSITIVE MUCOSAE PROTECTION

TARGET: SENSITIVE MUCOSAE

**RECOMMENDED USAGE
CONCENTRATION**

0,5 - 1,5%

Mucosal surfaces play a key protective role and help shield the body from continuous exposure to external agents. When their physiological barrier is weakened, mucosae become more vulnerable and more prone to irritation, pain, discomfort, and increased sensitivity. This is especially relevant for delicate areas such as the oral and vaginal mucosa, where barrier alteration can significantly affect local comfort and quality of life.

COSMETIC BENEFITS

**In vitro
&
ex vivo
tests**



**MUCOSAL
PROTECTION
ON VAGINAL CELLS**



**HIGHER MUCO-
ADHESIVITY THAN
HYALURONIC ACID**



**MUCOSAL
PROTECTION
ON BUCCAL CELLS**



**SOOTHING AND
CALMING ACTIVITY**

APPLICATIONS



ORAL CARE



INTIMATE CARE

BIONAP
BIOACTIVE NATURAL PRODUCTS

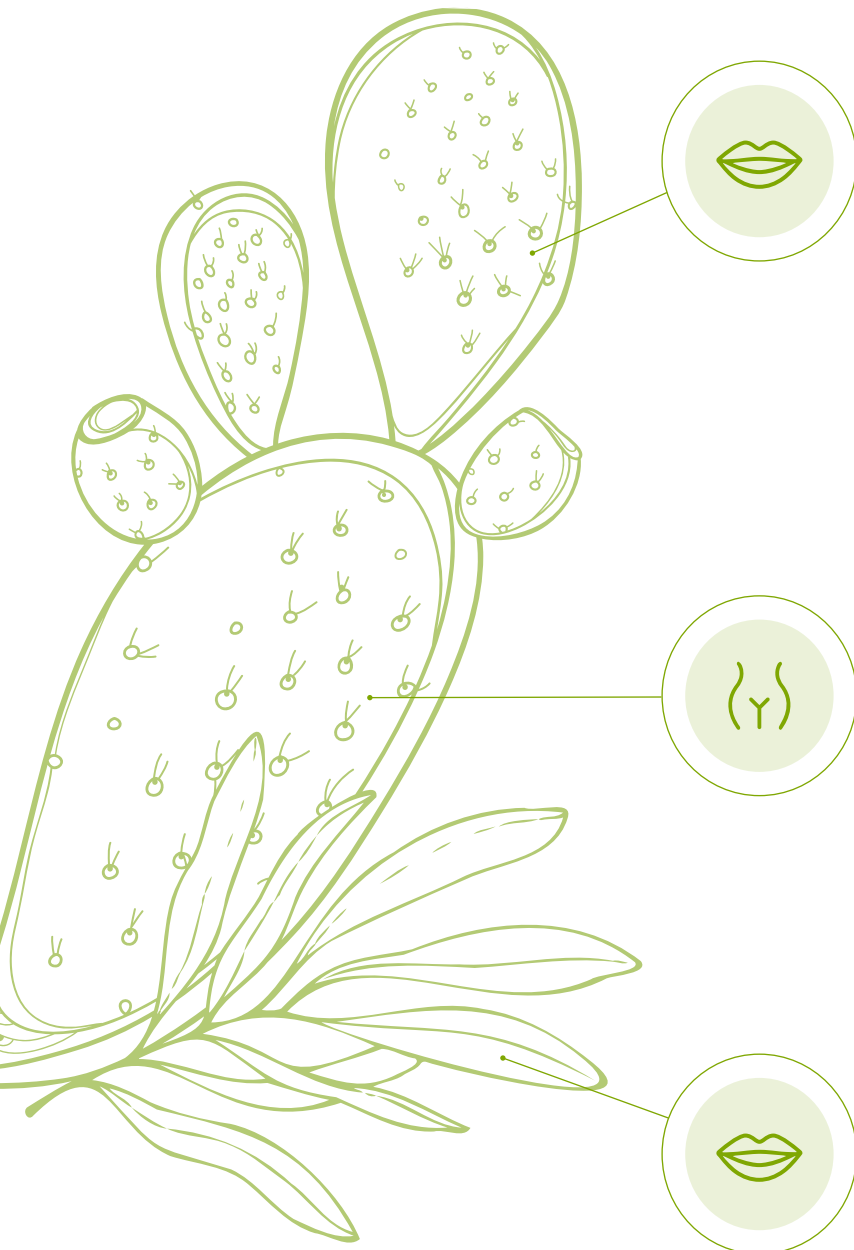
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WHAT IT DOES

MUCOSAVE™ CG has been evaluated for oral and vaginal mucoadhesivity and anti-inflammatory activity in in vitro and ex vivo models.

**ORAL MUCOADHESIVITY
TESTED IN VITRO AND
IN A TOOTHPASTE FORMULATION**

- Shows high mucoadhesivity on buccal cells
- Enhances mucoadhesion in toothpaste formulations over time
- Helps protect the mucosal surface through prolonged adhesion

**VAGINAL MUCOADHESIVITY
TESTED IN VITRO ON VAGINAL TISSUE**

- Adheres to vaginal mucosal tissue
- Shows concentration-dependent mucoadhesivity
- Supports protective surface coverage

**ORAL ANTI-INFLAMMATORY
ACTIVITY****TESTED IN VITRO ON BUCCAL CELLS**

- Demonstrates anti-inflammatory activity on mucosal cells
- Inhibits ICAM-1 overexpression
- Supports mucosal soothing

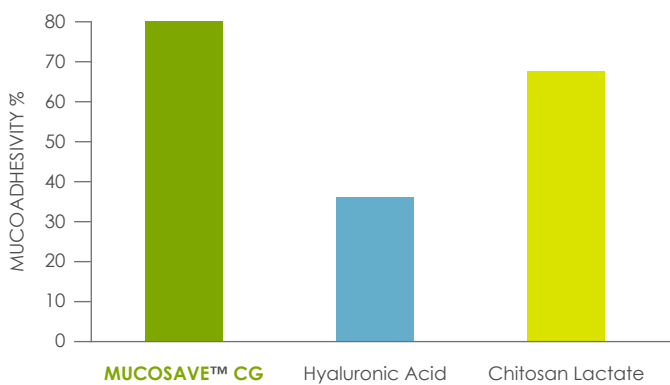
IN VITRO EVALUATION OF MUCOADHESIVITY

MUCOSAVE™ CG exhibited extremely high mucoadhesive ability compared with hyaluronic acid and chitosan lactate.

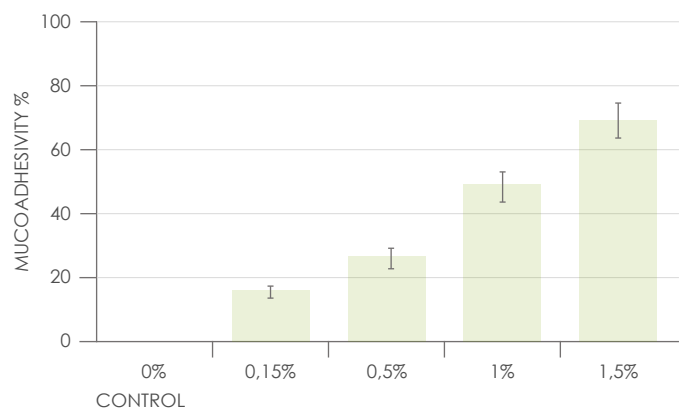
MUCOSAVE™ CG adheres to vaginal mucosal tissue, with mucoadhesivity increasing in a concentration-dependent manner up to 70%.



ON ORAL BUCCAL CELLS



ON VAGINAL TISSUE



These findings highlight the ability of **MUCOSAVE™ CG** to protect the mucosal surface through the physical barrier effect of Opuntia polysaccharides, combined with the soothing activity of olive polyphenols.

NATURAL MOUTHWASH

PHASE	INCI/PCPC	%
A	Aqua/Water	80,6
	Sorbitol	10
	Sodium lauroyl sarcosinate	0,5
	Glycerin	5
	1,2-hexanediol, caprylyl glycol	1,5
	Xylitol	0,7
B	Opuntia ficus-indica stem extract, Olea europaea (olive) leaf extract, maltodextrin	0,5
	Sulfated castor oil	1
	Citrus sinensis (orange) peel oil	0,2

CALMING AND PROTECTIVE INTIMATE WASH

PHASE	INCI/PCPC	%
A	Aqua/Water	67,2
	Glycerin	4
	Xanthan Gum	0,5
	Cellulose Gum	0,3
	Opuntia ficus-indica stem extract, Olea europaea (olive) leaf extract, Maltodextrin	0,5
B	Benzyl Alcohol, Glyceryl Caprylate, Glyceryl Undecylenate	1,5
	Glycol Distearate (and) Steareth-4	3,5
	Ammonium Lauryl Sulphate	8
	Cocamidopropyl betaine	5
	Disodium Cocoamphoacetate	6
	Coco-Glucoside (and) Glyceryl Oleate	1
	Tocopherol, sunflower seed oil	0,05
C	PEG-40 hydrogenated castor oil	0,2
	Parfum/fragrance	0,2
	Mentha Suaveolens flower oil	0,05
D	Citric Acid	2

BIBLIOGRAPHY:

Rizza L et al. Caco-2 cell line as a model to evaluate mucoprotective properties. Int J Pharm 422(1-2):318-322 (2012)