

For Protection of Skin Against Irritation, Dryness and
Mitigation of Sensitive and Reactive Skin

NIO-KIOL

NIOSOME TECHNOLOGY



PGE2 Inflammation Signal
Reduced Over 60%

Skin Smoothness +62%

AN EFFECTIVE COMPLEX FOR IRRITATED SKIN TREATMENT

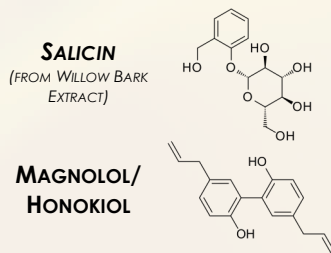
NIO-KIOL is a synergic botanical complex encapsulated into elastic niosomal vesicles consisting in highly purified Magnolol and Honokiol extracted from Magnolia bark and Salicin extracted from White willow.

Thanks to its specific composition, **NIO-KIOL calms over-reactive skin** reducing inflammatory state (Erythema and Rosacea) and **prevents premature dermal matrix degradation**.

NIO-KIOL IS THE ANTI-INFLAMMATORY COMPLEX ABLE TO CALM IRRITATION AND REBALANCE OVER-REACTIVE STATE, IMPROVING SKIN TEXTURE, TONE AND HEALTHY LOOK



NIO-KIOL NATURAL INGREDIENTS



ANTI-INFLAMMATORY (ASPIRIN-LIKE ACTIVITY)

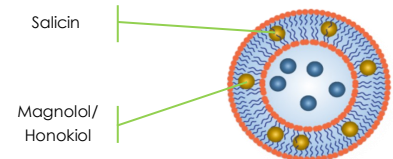
Inhibit cyclooxygenase enzymes and rebalance skin over-reactive state

ANTI-OXIDANT & ANTI-INFLAMMATORY

Reduce Inflammatory Signals & Dermal Matrix Degradation

NIO-KIOL

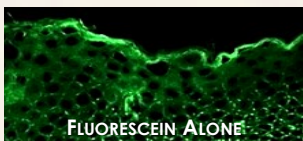
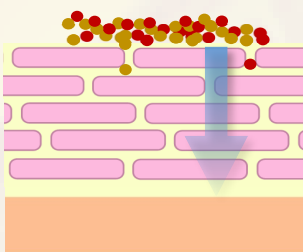
NATURAL INGREDIENTS ARE ENCAPSULATED INSIDE **NIOSOME VESICLES**



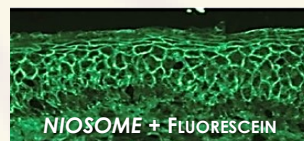
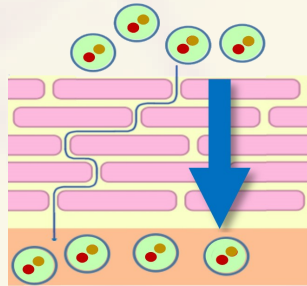
ULTRA-DEFORMABLE NIOSOME

The Most Advanced Skin Delivery System

CLASSIC ACTIVE INGREDIENTS

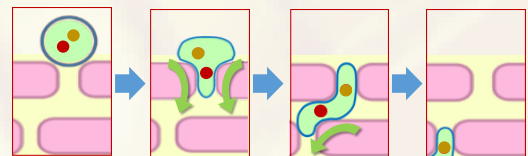


FLUORESCIN ALONE



NIOSOME + FLUORESCIN

Ultra-Deformable Niosome are elastic vesicles able to **squeeze through Stratum Corneum** reaching living cells inside epidermis increasing the bioavailability of active ingredients



NIOSOME DELIVER ACTIVE INGREDIENTS WHERE MUST BE REALLY EFFECTIVE
DRIVING THROUGH THE STRATUM CORNEUM

NIO-KIOL MODE OF ACTION

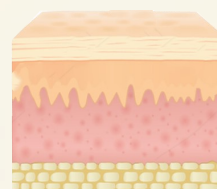
STRESS FACTORS



++ Over-reactive Skin
↓
++ Chronic Inflammation
↓
++ Dermal Matrix Degradation

Erythema, Rosacea, Acne

With NIO-KIOL

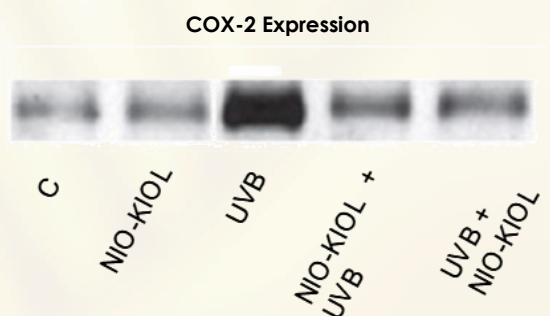


-- Reduced COX expression
↓
-- Reduced Inflammation
↓
++ Smooth Skin

Healthy Skin

**NIO-KIOL ON COX-2 ENZYMES**

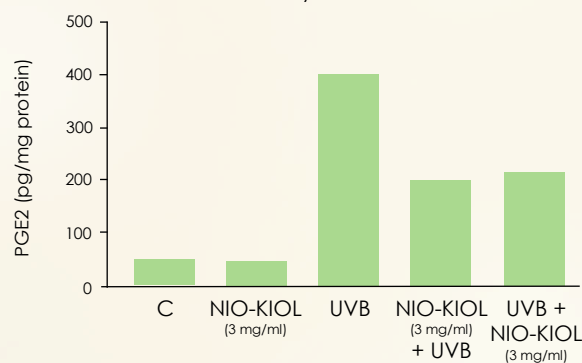
Western Blot analysis with COX-2 antibodies on protein expression after UVB irradiation (10mJ/cm²)



SIGNIFICANT COX-2 INHIBITOR EFFECT

NIO-KIOL ON PGE2 EXPRESSION

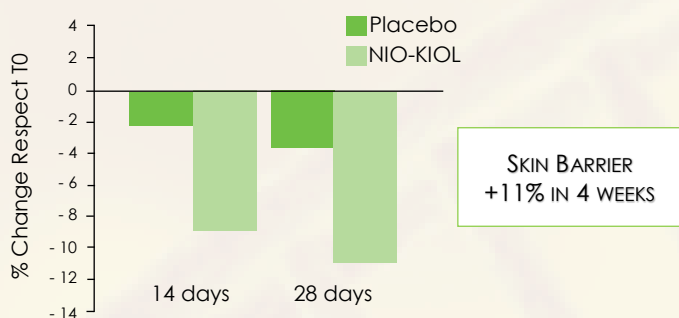
Determination of PGE2 expression with Elisa assay in UVB-irradiated Keratinocytes



PGE2 EXPRESSION REDUCED OVER 60%

**NIO-KIOL ON SKIN BARRIER INTEGRITY**

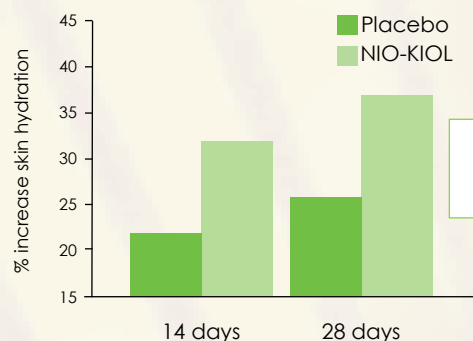
Assessment of TEWL using Dermalab Combo applying placebo or 3% NIO-KIOL cream twice daily for 28 days



**SKIN BARRIER
+11% IN 4 WEEKS**

NIO-KIOL ON SKIN HYDRATION

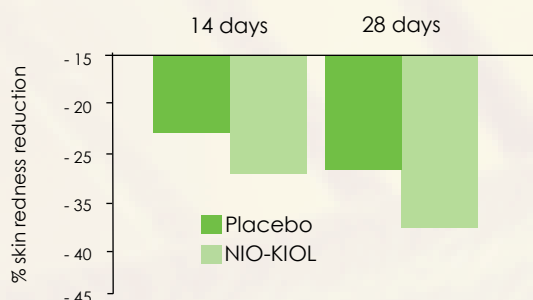
Assessment of Skin Hydration using Dermalab Combo applying placebo or 3% NIO-KIOL cream twice daily for 28 days



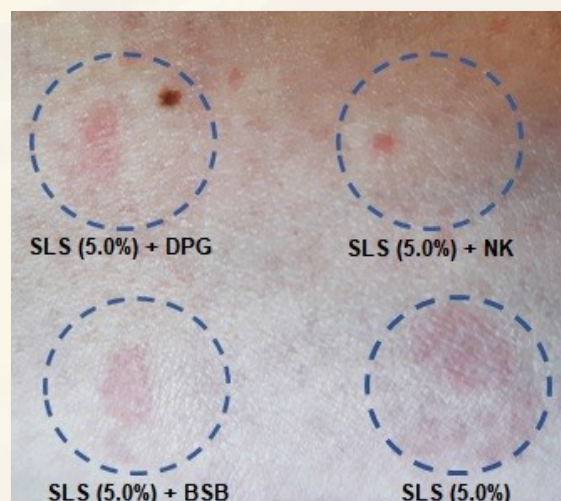
**SKIN HYDRATION
+37% IN 4 WEEKS**

NIO-KIOL ON SKIN REDNESS

Chromatometric measurement of redness reduction applying placebo or NIO-KIOL 3% twice daily for 28 days

**NIO-KIOL COMPARISON** with other cosmetic ingredients

Assessment of redness reduction applying Alpha-Bisabolol (0,3%), Dipotassium Glycyrrhizate (0,3%) and NIO-KIOL (1,0%) after SLS (5%) exposure.



NIO-KIOL

NIOSOME TECHNOLOGY

FOR OVER-REACTIVE SKIN

CLAIMS

- ANTI-INFLAMMATORY
- ANTI-ROSACEA
- REDNESS AND SUN BURN SOOTHING
- REFRESHING

COSMETIC APPLICATION

- ANTI-REDNESS SKIN CARE
- PROTECTIVE FORMULAS
- SUN CARE PRODUCTS

INCI NAME

Salix Alba (Willow) Bark Extract, Magnolol/Honokiol, Polyglyceryl-10 Oleate, Apricot Kernel Oil Polyglyceryl-6 Esters, Sorbitan Palmitate, Aqua/Water

SAFETY & TOXICITY

Reference COMMISSION REGULATION (EC) No 987/2008 of 8 October 2008 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH):

- non-irritating
- non-toxic

FORMULATION SUGGESTIONS

Use Levels:	1 - 3%
pH range:	3,5 - 8,5
Incorporation:	Dilute in water before blending. Do not heat above 50°C
Origin:	Botanical
Application:	Lotions, O/W and W/O emulsions, Gels
Preservative:	None
Solubility:	Dispersible in water
Compliant regulation:	US - EU - China - Japan
Certification:	COSMOS Approved



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