

A Natural Multi-Level System to Contrast Oily Skin and
Hyper-Seborrhoea Excretion

NIO-SEBACTIVE

NIOSOME TECHNOLOGY



Sebum Production –35%

Shiny Looking Skin –27%

AN EFFECTIVE COMPLEX FOR OILY SKIN TREATMENT

Thanks to its specific composition including Nobiletin (Tangerine peel extract), Oleonic Acid, and Saw Palmetto Extract all encapsulated into elastic niosomal vesicles, NIO-SEBACTIVE restores natural sebum production acting at multiple levels:

- **Reduce Triacylglycerol levels**, the major sebum lipid component, through the inhibition of diacylglycerol acyltransferase (DGAT)
- **Reduce Sebum Production Rate** by 5 α -Reductase inhibition
- **Reduce Inflammation Signals** lowering lipoxigenase and cyclooxygenase levels

NIO-SEBACTIVE IS THE NATURAL MULTI-ACTIVE SYSTEM TO CONTRAST OILY SKIN, HYPERSEBORRHOEA AND UNPLEASANT SKIN



NIO-SEBACTIVE NATURAL INGREDIENTS

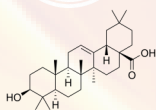
CITRUS RETICULATA PEEL EXTRACT



SEBACEOUS CELL CONTROL

Anti-acne agent that inhibits lipogenesis and sebaceous cells proliferation

OLEANOLIC ACID



ANTI-INFLAMMATION

Strong inhibitor of cyclooxygenase and lipoxigenase, reducing synthesis of PGE2 and leukotriene B

SERENOA SERRULATA FRUIT EXTRACT



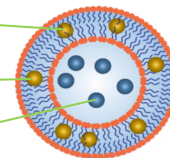
SEBUM PRODUCTION REGULATION

5 α -Reductase enzyme inhibitor, key step in sebum regulation

NIO-SEBACTIVE

NATURAL INGREDIENTS ARE ENCAPSULATED INSIDE **NIOSOME VESICLES**

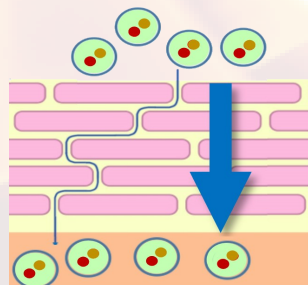
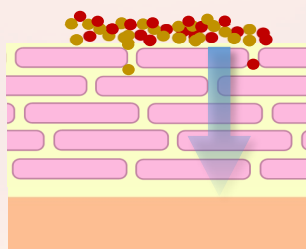
Citrus reticulata
Peel Extract
Oleonic Acid
Serenoa serrulata
Fruit Extract



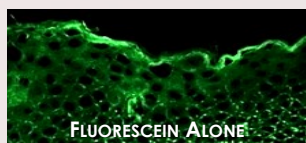
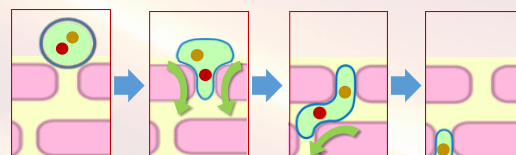
ULTRA-DEFORMABLE NIOSOME

The Most Advanced Skin Delivery System

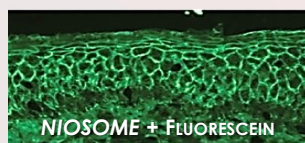
CLASSIC ACTIVE INGREDIENTS



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



FLUORESCIN ALONE



NIOSOME + FLUORESCIN

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

NIO-SEBACTIVE MODE OF ACTION

STRESS FACTORS

Chrono&Photo Aging, Pollution, Poor Nutrition



++ Ormonal Changes

++ DiHydroTestosterone

++ Sebum Production Rate

Oily Skin

With NIO-SEBACTIVE



-- DGTA

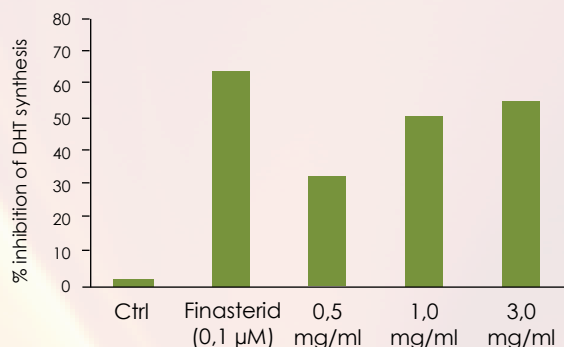
-- 5 α -Reductase

-- Sebum Production Rate

Anti-Seborreic Effect

**NIO-SEBACTIVE ON DHT SYNTHESIS**

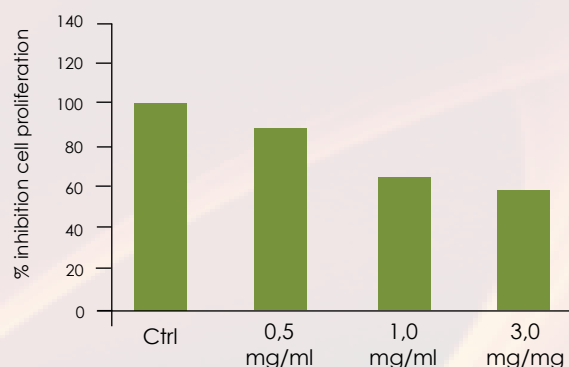
Measurement of DHT Synthesis Inhibition in Sebocyte cells in culture with Placebo, Finasteride or 0,5–3 mg/ml NIO-SEBACTIVE Solution after 48 hours



DHT SYNTHESIS –54%
EFFECT COMPARABLE WITH FINASTERIDE

NIO-SEBACTIVE ON SEBACEOUS CELL GROWTH

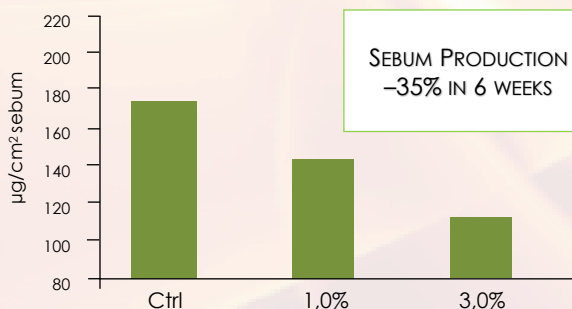
Measurement of Sebaceous cell (SZ95) growth with MTT Method in culture with 0-3 mg/ml NIO-SEBACTIVE Solution after 98 hours



GROWTH OF SEBACEOUS CELLS –42%

**NIO-SEBACTIVE ON SEBUM PRODUCTION**

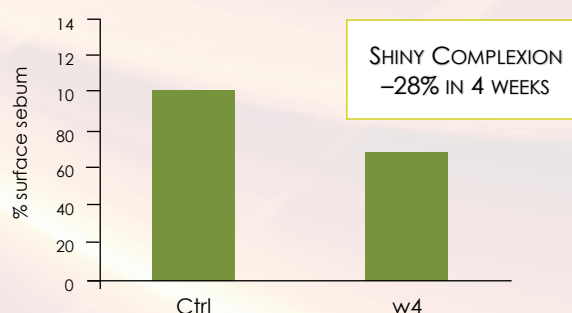
Measurement of Sebum Production using SEBUTAPE method using 1-3% NIO-SEBACTIVE applied twice daily for 6 weeks



SEBUM PRODUCTION –35% IN 6 WEEKS

NIO-SEBACTIVE ON SHINY COMPLEXION

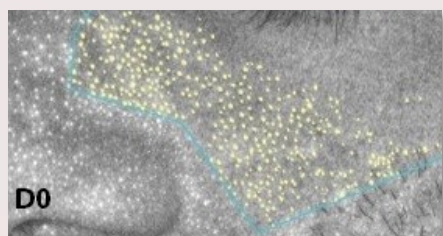
Measurement of skin surface sebum using SEBUMETER using 3% NIO-SEBACTIVE applied twice daily for 4 weeks



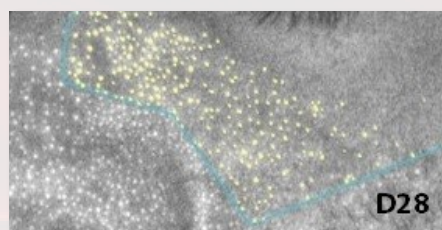
SHINY COMPLEXION –28% IN 4 WEEKS

NIO-SEBACTIVE ON PORPHIRIN NUMBER

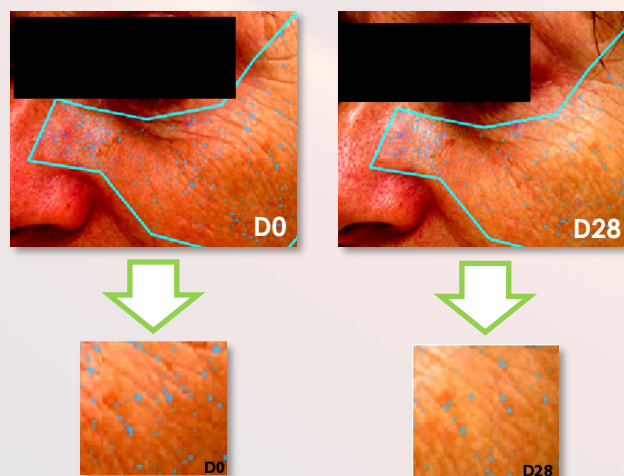
Measurement of number of skin porphyrin (bacterial excretions lodged in pores) using 2% NIO-SEBACTIVE applied twice daily for 4 weeks



NUMBER OF PORPHIRINS –27% IN 4 WEEKS

**NIO-SEBACTIVE ON LARGE PORES NUMBER**

Measurement of number of large pores using 2% NIO-SEBACTIVE applied twice daily for 4 weeks



NUMBER OF LARGE PORES –43% IN 4 WEEKS

NIO-SEBACTIVE

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FOR OILY SKIN AND EXCESSIVE SEBUM PRODUCTION

CLAIMS

- ANTI-SEBUM
- ANTI-ACNE
- OILY SKIN

COSMETIC APPLICATION

- SEBUM REGULATORY CREAM
- SEBUM BALANCING CREAM
- ANTI-ACNE CREAM

INCI NAME

Citrus Reticulata (tangerine) Peel Extract, Oleanolic Acid, Serenoa Serrulata Fruit Extract, Magnolol/Honokiol, Polyglyceryl-10 Laurate, Polyglyceryl-6 Oleate, Sorbitan Oleate, 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, Biotechnological |
| 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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