

Formulation

• Whitening hand cream

	INCI/ PCPC	% (w/w)
A	Glyceryl Stearate, Ceteareth-20	3.00
	Cetearyl Alcohol	2.00
	Dimethicone	3.00
	Titanium Dioxide, Trimethoxycaprylsilane	4.00
	Caprylic/Capric Triglyceride	2.00
	PEG-11 Stearyl Ether	3.00
	Caprylic/Capric Triglyceride, Stearalkonium Hectorite, Propylene Glycol	3.00
	Diethylhexyl Carbonate	3.00
B	Aqua (Water)	71.04
	Disodium EDTA	0.10
	Phenoxyethanol, Ethylhexylglycerin	0.80
C	Polyacrylamide, C13-14 Isoparaffin, Laureth-7	1.95
D	DARKOUT™	2.00
E	Parfum (Fragrance)	0.20
F	Maris Aqua (Sea water)	0.80
G	Sodium Hydroxide, Aqua (Water)	0.11

Technical specifications

ACTIVE MOLECULES	Hypoxoside
APPEARANCE	Transparent viscous liquid - opalescent
SOLUBILITY	Soluble in aqueous solutions
RECOMMENDED DOSE	1-4 %

Darkout™

Welcome to a flawless skin tone



Lightening

Whiter, lighter, brighter...

Lightening products are a fast growing segment in the last years, with an amazing increase in the demand all over the world.

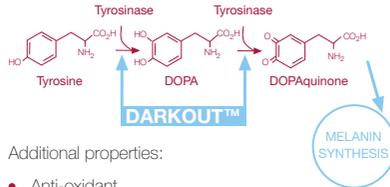
- For Caucasian skins, pigmentation disorders and a dull skin tone affects very much perceived age.
- For Asian skins, a whiter complexion is a symbol of beauty and high social status.



DARKOUT™, is the answer to lightening treatments.

Purified extract of rhizome of *Hypoxis Rooperi*, rich in hypoxoside:

- Inhibits tyrosinase, the key enzyme at the beginning of melanin biosynthesis process:



Additional properties:

- Anti-oxidant
- Collagen synthesis stimulating

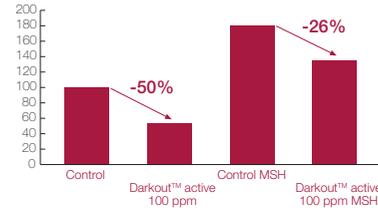
DARKOUT™, is made of a tridimensional matrix of galactomannans, where the active fraction of *Hypoxis Rooperi* is injected, through an innovative technologic process, which allows the **sequential release** when applied on the skin.

Darkout™

- Inhibits melanin synthesis.
- Unifies skin tone.
- Provides a youthful radiance.
- Reduces the appearance of pigmentation disorders.

Tyrosinase expression inhibition

- Densitometric intensity of tyrosinase



RESULT: both for basal and activated melanocytes, the expression of tyrosinase diminishes with **DARKOUT™**.

Anti-oxidant activity

At 100 ppm, **DARKOUT™** active inhibits the **50%** of Reactive Oxygen Species.

RESULT: anti-oxidant activity works in synergy and intensifies lightening properties.

Collagen synthesis

At 100 ppm **DARKOUT™** active:

Increases collagen I up to **109%**

Increases collagen III up to **51%**

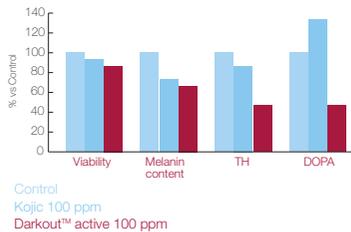
RESULT: collagen renewal for a younger and brighter skin.

In Vitro Efficacy

Tyrosinase activity inhibition and melanin inhibition

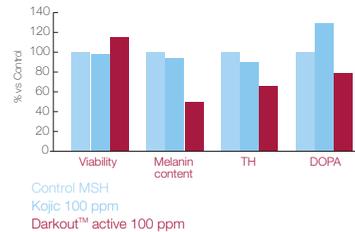
B16 melanocytes under basal conditions:

- B16 basal Melanocytes



In conditions of stimulated melanocytes, simulating hyperpigmentation:

- Activated B16 Melanocytes



TH: tyrosinase activity, as tyrosine hydroxylase - DOPA: tyrosinase activity, as dopa- oxidase

RESULT: **DARKOUT™** reduces the synthesis of melanin in both situations. Inhibition is even superior in hyperactive melanocytes.

DARKOUT™ can be included in many different types of formulations

- Face care
- Body care
- Hands

And in many different lines

- Lightening
- Anti-spots
- Anti-aging, as one of the actives of a blend

DARKOUT™, triple action for radiant results

- Lightening
- Anti-oxidant
- Collagen synthesis stimulating

