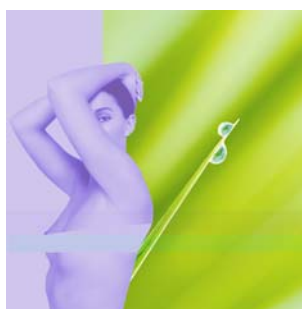




GB

PRODHYWHITE[®] CONCENTRE

CONCENTRATED PRODHYWHITE[®]



LETICC
ZAC de la Prévôté
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78550 HOUDAN – France

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CUTANEOUS HYPER-PIGMENTATIONS AND WHITENERS USED IN COSMETIC

The troubles of the pigmentation appear with the age, the nature of the skin or an hormonal disturbance (freckles, senile lentigo, mask of pregnancy ...) and are often badly endured.

Now, we have whitener products which can reduce these troubles.

MELANOGENESE AND HYPER-PIGMENTATIONS

The Melanine, pigment which colors the skin and the hair, is always at the origine of these troubles. We generally establish a difference between the eumelanines (brown) and the phaeomelanines (red). Present by mat and dark complexion persons, the first are very resistant, very protectiv and insoluble in an alkaline environment. The second, frequent by the red-haired persons and dark-haired persons, are soluble in alkaline solutions. In principle the formation of the melanine, brown or red, forms continuously and harmoniously in the skin and the hair, but under certain conditions, or under the effect of certain factors, troubles of the pigmentation can appear.

THE HYPER-PIGMENTATIONS

The hyper-pigmentations mainly treated by Cosmetic are freckles, mask of pregnancy and spots of elderly. Two main causes at the origine of these troubles : the increased activity and the proliferation of the melanocytes.

The hyper-pigmentations bound with an increased activity of the melanocytes

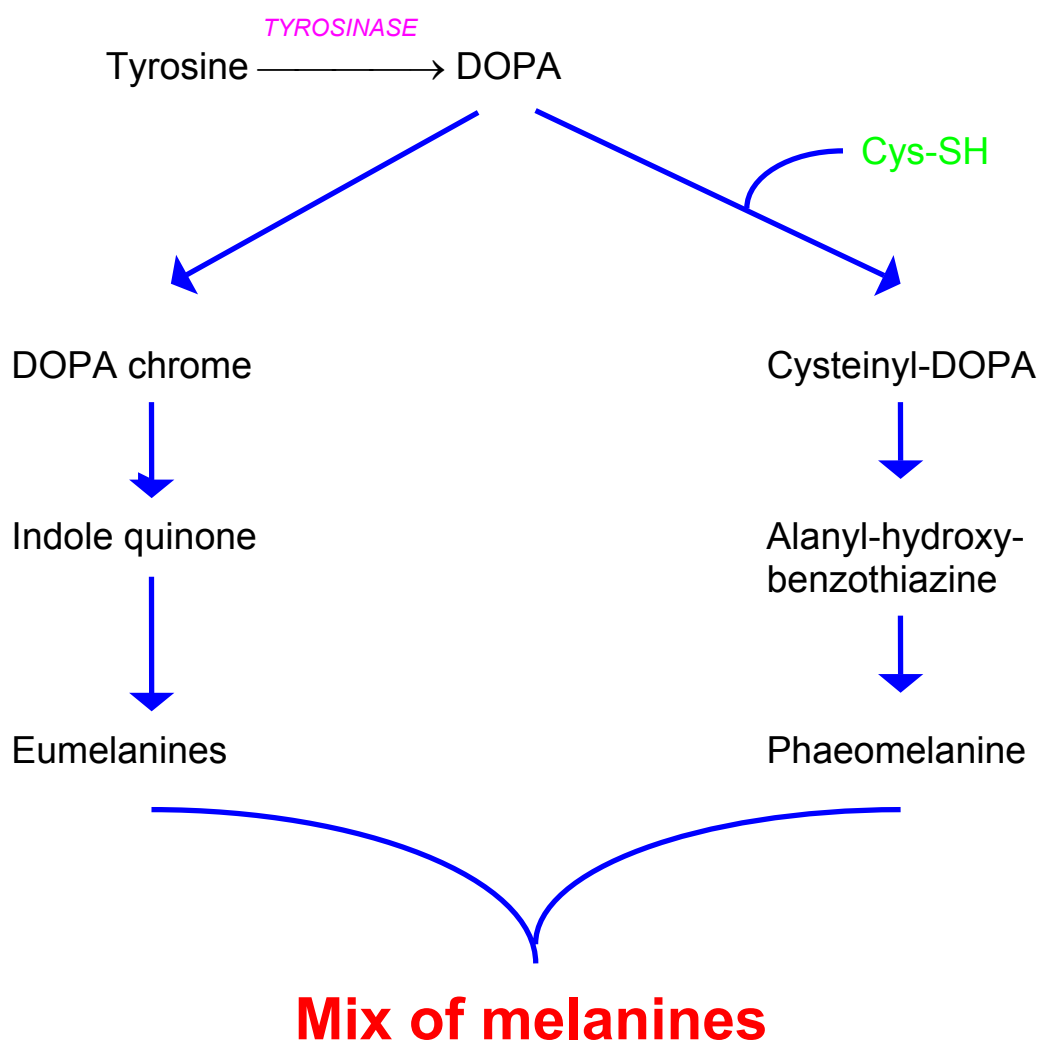
They are, on the one hand, the ephelids, commonly named "freckles". Of small size, they appear during the childness, generally on the clear skins, and particularly on the uncovered parts (face, neck, forearms, back of the hands). Their color, dark in the summer, tones down in winter. The histologic exam of the affected zones displays an anormal number of melanocytes with an excessive activity, what causes a storage of pigments in the cells of the basal level of the epidermis.

The other form of hyper-pigmentation is caused by a melanocytary hyperactivity : the chloasma or mask of pregnancy. Though it can be released by the dose of oral contraceptives, it mainly extends on and after the second month of pregnancy, in pigmentary spots form of several centimeters of diameter of more or less intensive color. The spots are symetrically put on each side of the median line of the face.

The hyper-pigmentations bound with a melanocyttaire proliferation

The senile lentigo, still named spot of elderly or flower of graveyard, makes occur this second mechanism. The brown spots appear with this age on the back of the hands, the forearms, the face and other uncovered parts. Histologically, the senile lentigo presents an hyper-pigmentation of the basis stratum of the epiderm, with increase of the number of melanocytes.

BIOSYNTHESIS OF THE MELANIN



DATA SHEET

DATA PROFILE, CONCENTRATED PRODHYWHITE®, VERSION 02 – 02/2006

CONCENTRATED PRODHYWHITE®

CONCENTRATED PRODHYWHITE®

1 - Address

LETICC
ZAC DE LA PREVOTE
6, ROUTE DE BU
78550 HOUDAN
FRANCE
TEL : (33) 01 30 46 10 12
FAX : (33) 01 34 59 70 08

2 - General characteristics

2.1. - Chemical description

Hydroglycolic plant extract.

2.2. - Raw materials

Végétal	Morus alba Glycyrrhiza glabra Scutellaria baicalensis Arctostaphylos uva ursi
Petrochemical Synthetic	Butylène glycol kojic acid

3 - Composition

Solvent	Water	10.0 ± 5.0 %
	Butylène glycol	90.0 ± 5.0 %
Plantes	Morus alba	70.0 ± 5.0 %
	Glycyrrhiza glabra	10.0 ± 5.0 %
	Scutellaria baicalensis	10.0 ± 5.0 %
	Arctostaphylos uva ursi	10.0 ± 5.0 %
Additives	kojic acid	3.0 ± 2.0 %
Ratio	Plants / extract	1/6

4 - Registration

CAS	EINECS
7732-18-5	231-791-2
107-88-0	203-529-7
-	-
84775-66-6	283-895-2

CAS	EINECS
94279-99-9	304-845-9
84776-10-3	283-934-3
501-30-4	207-922-4

5 - Denomination

I.N.C.I.	C.T.F.A.	JAPON
AQUA BUTYLENE GLYCOL	WATER BUTYLENE GLYCOL	WATER 1,3- BUTYLENE GLYCOL
MORUS ALBA	MORUS ALBA ROOT EXTRACT	MULBERRY ROOT EXTRACT
GLYCYRRHIZA GLABRA	GLYCYRRHIZA GLABRA (LICORICE) EXTRACT	GLYCYRRHIZA EXTRACT
SCUTELLARIA BAICALENSIS	SCUTELLARIA BAICALENSIS ROOT EXTRACT	SCUTELLARIA ROOT EXTRACT
ARCTOSTAPHYLOS UVA URSI	ARCTOSTAPHYLOS UVA URSI LEAF EXTRACT	BEARBERRY EXTRACT
KOJIC ACID	KOJIC ACID	-

6 – Manufacturing process

Plant extraction with hydroglycolic solvent, filtration.

7 - Quality control data

(Data certified for each batch)

7.1. - Organoleptic characters

Appearance	Liquid
Colour	Amber
Odour	Weak

7.2. - Physico-chemical characteristics

pH	4.0 - 6.5
Refraction index at 20°C	1.380 ± 0.010
Density at 20°C	1.020 ± 0.010

7.3. - Additional descriptive data

Keep in dry storage (under 18°C if possible).

8 - Impurities

TEST

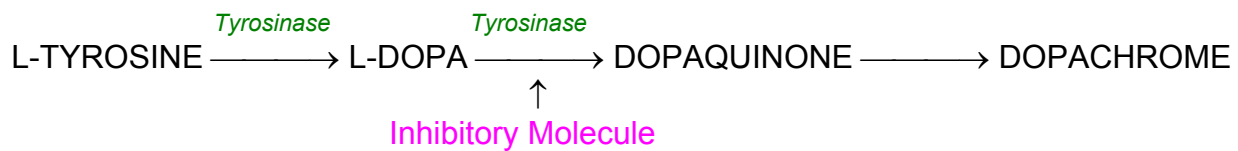
EVALUATION OF THE ACTIVITY ANTI-TYROSINASE IN VITRO

TARGET OF THE STUDY

To display in vitro an eventual effect anti-tyrosinase, effect allowing the whitening of the skin.

PRINCIPLE OF THE TEST

The Tyrosinase catalyses the following reactions :

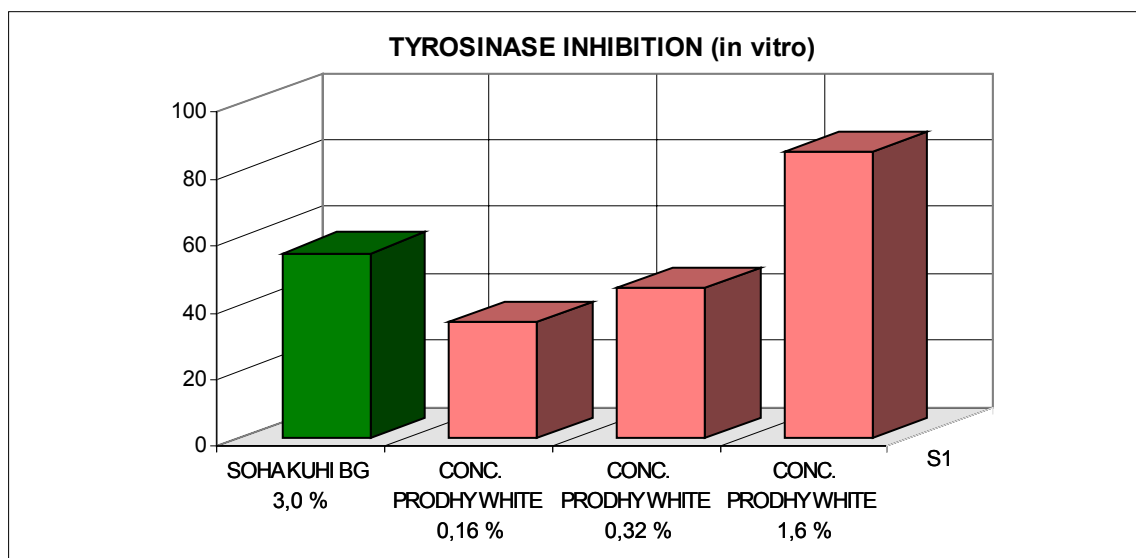


We observe the apparition of the Dopachrome at 475 nm. We observe the influence of the add of a molecule to test on the speed of the apparition of the Dopachrome, in relation with a pilot kinetic realized without inhibitor.

We supply, as enzymatic substrate to the Tyrosinase some L-DOPA.

RESULTS

PRODUCT	CONCENTRATION OF ACTIVE (%)	% OF INHIBITION OF THE ENZYMATIC REACTION
SOHAKUHI BG	3,00	55,0
CONCENTRATED PRODHYWHITE	0,16	34,6
CONCENTRATED PRODHYWHITE	0,32	44,7
CONCENTRATED PRODHYWHITE	1,60	85,2



MANUFACTURE SCHEME

EXTRACTION

DECANTATION

FILTRATION

ORGANOLEPTIC CONTROL

PHYSICO-CHEMICAL CONTROL

MICROBIOLOGIC CONTROL

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HEALTH AND SAFETY DATA

Health and Safety Data according to 91/155/CEE, CONCENTRATED PRODHYWITHE, Version 02 – 02/2006
Classification and labelling according to the decrees about health and safety data elaboration and passing on modalities.

PRODHYWHITE® CONCENTRE

CONCENTRATED PRODHYWHITE®

- 1 - PRODUCT AND COMPANY IDENTIFICATION

Product identification: PRODHYWITHE® CONCENTRE

Company identification: LETICC
ZAC DE LA PRÉVÔTÉ
6, ROUTE DE BÛ
78550 HOUDAN
FRANCE
TEL : 33 (1) 30 46 10 12
FAX : 33 (1) 30 59 70 08

- 2 - COMPONENTS / COMPONENTS INFORMATION

<u>INCI</u>	<u>CAS</u>	<u>EINECS</u>
AQUA	7732-18-5	231-791-2
BUTYLENE GLYCOL	107-88-0	203-529-7
MORUS ALBA	-	-
GLYCYRRHIZA GLABRA	84775-66-6	283-895-2
SCUTELLARIA BAICALENSIS	94279-99-9	304-845-9
ARCTOSTAPHYLOS UVA URSI	84776-10-3	283-934-3
KOJIC ACID	501-30-4	207-922-4

- 3 - RISKS IDENTIFICATION

None in normal use.

- 4 - FIRST AID

After inhalation :
Inapplicable

After skin contact :
Rinse with running water

After eyes contact :
Rinse with running water (10 minutes),
If necessary, take ophtalmological advice.

- 5 - MEASURES AGAINST FIRE

Adapted extinction means :
Moss, extinction powder, carbonic anhydride, vaporized water.

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Extinguishment means not to use for safety reasons :

None.

Particular risks due to the product explosion, the combustion products, the produced gas :

None

Special protection equipment for the persons in charge of struggle fire :

No special measures.

- 6 - MEASURES AFTER ACCIDENTAL DISPERSION

Individual precautions

Avoid the contact with skin and eyes.

Environmental protection

Do not flush away

Method of cleaning / adsorption :

Mix with an adsorbent the liquids material (sand, peat, sawdust).

- 7 - HANDLING AND STORAGE

Handling

Avoid opened flame.

Storage

In a fresh area, in the original packaging.

- 8 - CONTROL OF THE EXPLOSION / INDIVIDUAL PROTECTION

Measures allowing the exposition reducing :

No particular measure.

Limit value to control on the place of work :

None

Individual protection

Eyes protection : goggles.

- 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Liquid
Colour	Amber
Odour	Weak
pH	4.5 - 6.5
Density at 20°C	1.02

- 10 - STABILITY AND REACTIVITY

Conditions to avoid :

None in normal use.

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Material to avoid :

None in normal use.

Decomposition products :

If conformable use, none.

- 11 - TOXICOLOGICAL INFORMATIONS

Data non available.

- 12 - ECOLOGICAL INFORMATION

Data non available.

- 13 - CONSIDERATIONS ABOUT WASTE DISPOSAL

Incinerate in an agreed installation.

- 14 - INFORMATIONS ABOUT HAULAGE

Non concerned product by the regulating of dangerous materials haulage.

- 15 - REGULAR INFORMATION

Classification and labelling according to the decrees about health and safety data elaboration and transmission modalities.

Danger symbols :

No identification obligation.

Phrase R :

Inapplicable

Phrase S :

Inapplicable

- 16 - OTHER INFORMATION

The analytical specifications warranted are only those mentioned on the certificate of analysis supplied with each delivery of the product.

Except as set forth above, LETICC make no warranties, whether express, implied or statutory, as to the product which is the subject of this document. Without limiting the generality of the foregoing, LETICC make no warranty of merchantability of the product or of the fitness of the product for any particular purpose. Buyer assumes all risk and liability resulting from the use or sale of the product, whether singly or in combination with other goods. The information set forth herein is furnished free of charge and is based on technical data that LETICC believe to be reliable. It is intended for use by persons having technical skill and at their own discretion and risk. Since conditions of use are outside LETICC's control, LETICC make no warranties, express or implied, and assume no liability in connection with any use of this information. Nothing herein is to be taken as a license to operate under or a recommendation to infringe any patents.

BIBLIOGRAPHIE

- Hyperpigmentations cutanées et dépigmentants utilisés en Cosmétologie (P. FORLOT) /
COSMETOLOGIE N°3, page 55

- Etude du pouvoir anti-tyrosinase in vitro du Prodywhite Concentré / INOCOSM

FORMULA

WHITENING SKIN CREAM		11606
Composants	INCI	%
A	PRODHYCREME 013	10.0
	PEG-2 STEARATE / CETYL ALCOHOL / STEARYL ALCOHOL / MINERAL OIL / HYDROGENATED COCONUT OIL / CETEARTETH-25 / SODIUM STEARATE	
	PALMITATE D'ISOPROPYLE	5.0
	ISOPROPYL PALMITATE	
	PRODHYPHORE CST	2.0
	CETEARYL OCTANOATE	
	HELIOSOL 3	6.0
	OCTYL METHOXYCINNAMATE	
B	EAU DEMINERALISEE	66.5
	AQUA	
C	CONCENTRATED PRODHYWHITE	5.0
	BUTYLENE GLYCOL/ MULBERRY EXTRACT/ LICORICE EXTRACT/ BEARBERRY EXTRACT/ SCUTELLARIA ROOT EXTRACT/ KOJIC ACID	
	A.H.A. EXTRACT	5.0
	PEACH EXTRACT/ STRAWBERRY EXTRACT / MANGO EXTRACT / GUAVA EXTRACT / APRICOT EXTRACT / RASPBERRY EXTRACT/ GRAPEFRUIT EXTRACT / FRUITS OF THE LOOM EXTRACT	
D	PRESERVATIVE	0.5
	PHENOXYETHANOL / ETHYL PARABEN / METHYL PARABEN / PROPYL PARABEN/ BUTYL PARABEN	
	PERFUME	Q.S.
	FRAGRANCE	

OPERATING WAY

Heat separately **A** and **B** at 80°C.
 Add **B** to **A** while stirring.
 Add **C** at 60°C while stirring.
 Cool to 40°C, keeping the stirring, and add **D**.

*All the components can be supplied by
 Laboratoires PRODHYG on request*

