

# Sweetone<sup>®</sup>

## Imperfection corrector

Active ingredients from **biotechnological process**  
Extract of *Schizandra sphenanthera* berries  
Plant sourcing from the central region of **China**,  
Shaanxi province

**○ Controls aspecific,  
vascular and neurogenic inflammation**

**○ Reduces the synthesis of melanin  
and limits its spread through the epidermis**



Laboratoires Expanscience's  
contribution to sustainable  
development was evaluated at  
exemplary level by AFAQ 26000



Expanscience member  
of the UEBT for promoting  
biodiversity and complying  
with fair trade regulations



**EXPANSCIENCE<sup>®</sup>**

L A B O R A T O I R E S

# Identity

## Botanical information

**Botanical name:** *Schizandra sphenanthera*

**Local names:** *Schizandre à fleurs orangées* (France), *southern schisandra*, *lemon wood* (UK), *wu wei zi* (five flavour berry, China)

**Family:** Magnoliaceae

**Characteristics:** deciduous climbing vine that can reach 9 to 10 metres in height

**Fruit:** bunches of red berries similar to gooseberries, named 'five flavour berries' because of bitter, sweet, salty, sour and spicy flavours



**Environment:** wet, shady areas between 600 m and 3,000 m in altitude (woods, edges of forest areas, hedges, low walls), mild climates

**Traditional uses:** food (the berries are dried then infused) traditional chinese medicine (to relieve stress and fatigue and increase vitality; energizing/aphrodisiac effects)

## Supply chain from China (central region)

The *Schizandra sphenanthera* berries used to make SWEETONE® grow wild, without pesticides or fertilizers, and are harvested by hand according to best agricultural practices.

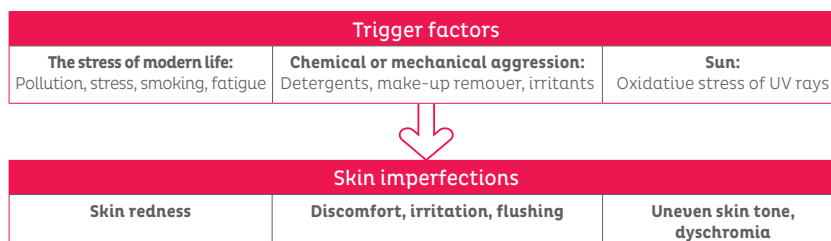
As a part of its commitment to fighting bio-piracy, Expanscience has documented the traditional knowledge associated with *Schizandra sphenanthera* berries to avoid any conflict with the use of biodiversity.

# Concept

## Dual action: soothing and unifying for a skin clear of imperfections

**Perfect skin** has become a universal quest. Today, women are looking for a miracle ingredient that can erase all the skin imperfections that appear due to the pressures of modern life (stress and fatigue) and environmental factors (pollution, tobacco, sun exposure, etc.). **Sensitive skin** concern, which affects two out of three women, also causes imperfections.

Skin imperfections include redness, small pimples, flushing, uneven skin tone, sun spots and discomfort, irritation or burning.

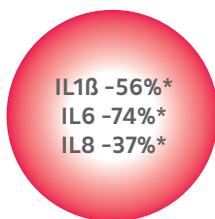


# Effectiveness in-vitro

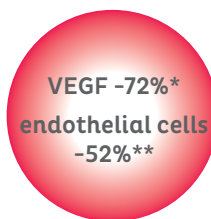
## Soothing effect: SWEETONE® globally modulates inflammation

Action on non-specific, vascular and neurogenic inflammation (in-vitro tests, 0.05% Hydrolysate of Schizandra ↔ 0.1% SWEETONE®)

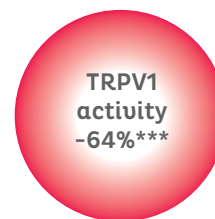
### ASPECIFIC INFLAMMATION



### VASCULAR INFLAMMATION



### NEUROGENIC INFLAMMATION



VEGF: Vascular Endothelial Growth Factor (stimulates the blood vessels formation)  
TRPV1: Transient Receptor Potential Vanilloid (cause of discomfort and flushes sensations)

\*keratinocytes, PMA stress (Phorbol Myristate Acetate)  
\*\* endothelial cells proliferation (vaisseaux), VEGF stress  
\*\*\* neurones/keratinocytes co-culture, capsaicin stress

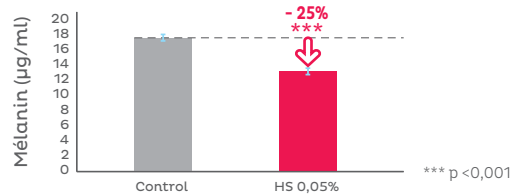
▶ **SWEETONE® modulates non-specific and vascular inflammation to limit the proliferation of endothelial cells and reduces skin imperfections, such as redness.**  
**By reducing neurogenic inflammation, SWEETONE® soothes the sensitive skins.**

## Unifying effect: SWEETONE® can modulate melanogenesis

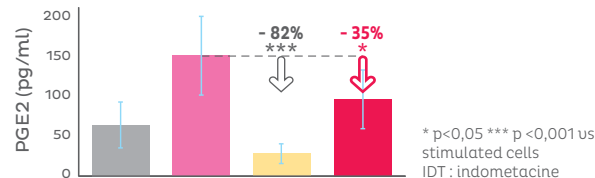
The effects of ultraviolet light, the ageing process and inflammatory stress can all result in pigmentation disorders. SWEETONE® is able to modulate these pigmentation disorders thanks to the:

- effect it has on limiting the synthesis of melanin: -25% (in-vitro test, melanocytes, 0.05% HS)
- effect it has on the dendricity of melanocytes: inhibits the release of PGE2 (-35%, in-vitro test, keratinocytes, 0.05%HS). PGE2, a lipid inflammation mediator, stimulates the dendricity of melanocytes, increasing the transfer of melanocyte melanin to the keratinocytes.

As such, SWEETONE® can potentially limit the spread of melanin in skin.



Melanin synthesis (melanocytes)



PGE2 release (Keratinocytes)

▶ Thanks to this dual action, SWEETONE® modulates the appearance of spots and dyschromia, creating a unifying effect on the complexion.

## Clinical study

Most non-homogenous complexions are caused by skin redness.

Using a randomised clinical trial, double-blind versus placebo, the benefits of SWEETONE® in reducing redness and creating a more uniform complexion is demonstrated. The assessment was carried out using an innovative technique that involved analysing images from photos taken in cross polarised light.

60 women (average age 36), divided into 2 homogenous groups, with sensitive skin and established redness, applied a cream containing either 0.5% SWEETONE® or the placebo for a period of 56 days. The cream was applied twice per day.

% change / T0	SWEETONE®	Placebo
T 28 d	-41,35%	-13,10%
T 56 d	-14,30%	+30,30%

Ability to reduce redness: measurement of the surface area covered by the blood vessels

% change / T0	SWEETONE®	Placebo
T 28 d	-8,93%	+13,00%
T 56 d	-5,00%	+36,20%

Ability to homogenise the complexion: measurement of contrast  
Reducing contrast results in a more uniform complexion.

● Self-assessment (% of satisfaction after 56 days):

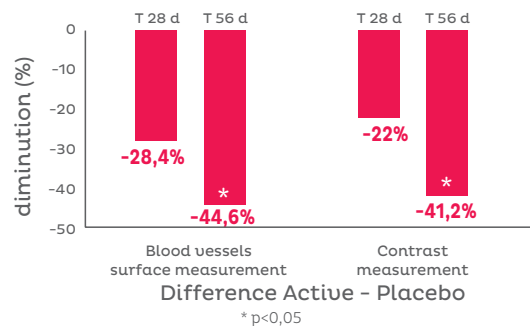
The results obtained are confirmed by the volunteers:

SWEETONE® limite l'apparition de nouvelles rougeurs diffuses 83 %

SWEETONE® diminue l'intensité des rougeurs diffuses 76 %

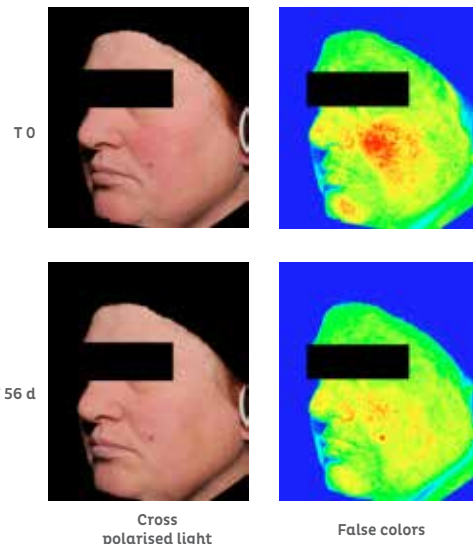
SWEETONE® limite l'apparition de nouvelles rougeurs localisées 69 %

▶ SWEETONE® reduces skin redness and smoothes the complexion.



Difference Active - Placebo

\* p<0,05



T 56 d

Cross polarised light

False colors

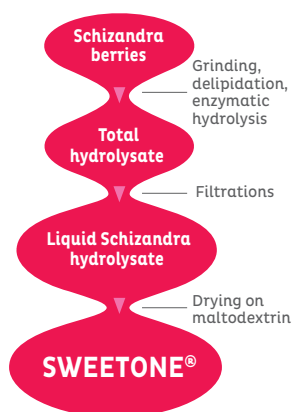
EFFECT MAKES SKIN APPEAR PERFECT AGAIN.

# Notes for formulators

## General information

- Description: fine orange-beige powder with a characteristic odour
- INCI name: *Schisandra Sphenanthera Fruit Extract and Maltodextrin\**  
**OR** *Saccharide Hydrolysate and Maltodextrin\*\**  
*\*Listed in IECIC - July 2014 (China)*  
*\*\*Listed in IECIC - July 2014 (China) & listed in CTFA 2004*
- Origin: plant – hydrolysate of Schizandra sphenanthera berries
- No residual protein
- Dose: 0.1% to 0.5%
- Solubility: hydrosoluble
- Recommended formulation temperature: add during cooling, at 35°C to 40°C
- pH of the aqueous solution (5% powder): 3.5 to 4.5
- Storage: between 15°C and 25°C, in an airtight sachet, protected from light and humidity
- Certification: certified for the formulation of Ecocertifiable finished products
- Patents: WO2011012612, 30/07/2009 - WO2011012615, 30/07/2009  
 FR14 61 518, 26/11/2014

## Process



## Applications

Imperfection corrector (skin-tone unifying treatment, BB-CC cream)  
 Soothing, anti-redness treatment for sensitive skin  
 After-sun treatment

## SWEETONE® in Pixel Perfect Anti-Blemish Complex to soothe and unify the sensitive skin

DEIONIZED WATER	Aqua		73,55%
EDETA BD	Disodium EDTA	BASF	0,10%
A RHODICARE T	Xanthan Gum, Aqua	SACI-CFPA	0,20%
CHLORPHENESIN BP 73	Chlorphenesin, Aqua	AZELIS	0,25%
AQUEOUS SODIUM HYDROXIDE SOLUTION 10%	Aqua, Sodium Hydroxide		1,30%
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SENSANOV WR	C20-22 Alkyl Phosphate, C20-22	SEPPIC	3,00%
LANETTE 16	Alcohols, Aqua	BASF	0,60%
LANETTE O OR	Cetyl Alcohol	BASF	0,70%
B REFINED MACADAMIA OIL (BCE 1010)	Cetearyl Alcohol	BIOSMETHIC	6,00%
TEGOSOFT OER	Macadamia Integriofolia Seed Oil	EVONIK GOLDSCHMIDT	5,00%
XIAMETER® PMX-200	Oleyl Erucate	UNIVAR	0,50%
SILICONE FLUID 100CS	Dimethicone		
CELLULOBEADS USF	Cellulose, Aqua	DAITO KASEI	1,00%
<hr/>			
C PHENOXYETOL	Phenoxyethanol	CLARIANT	0,80%
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D DEIONIZED WATER	Aqua		2,00%
<b>SWEETONE®</b>	<b>Schisandra Sphenanthera Fruit Extract and Maltodextrin</b>	<b>LABORATOIRES EXPANSCIENCE</b>	<b>0,50%</b>
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E PIXALIA®	Propanediol, Aqua, Rutin, Hydroxycinnamic Acid	LABORATOIRES EXPANSCIENCE	3,00%
VITAMINE E ACETATE CARE	Tocopheryl Acetate	BASF	0,10%
AQUEOUS SODIUM HYDROXIDE SOLUTION 10%	Sodium Hydroxide, Aqua		0,20%
PARFUM LOTUS BLANC SA	Fragrance	MLLE PARFUMETTE/ ACCORDS & PARF	1,20%
FML00118			

Formulation instructions on demand

[www.expanscience-ingredients.com](http://www.expanscience-ingredients.com)

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