

# SHISEIDO

## Makeup Technology

### CONTENTS

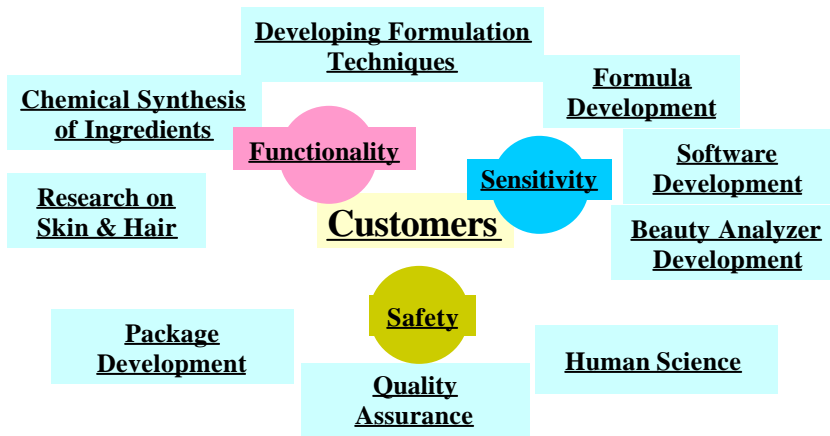
#### ***1. INTRODUCTION***

- .SHISEIDO Research Center & Global Research Network
- .Representative Research on Makeup in the Past

#### ***2. LATEST CUTTING EDGE TECHNOLOGY***

- .Lipstick
- .Foundation

**SHISEIDO Research Center in Japan**



**Europe Research Center (ERC)**

**.Mission.**

**Support business in Europe**

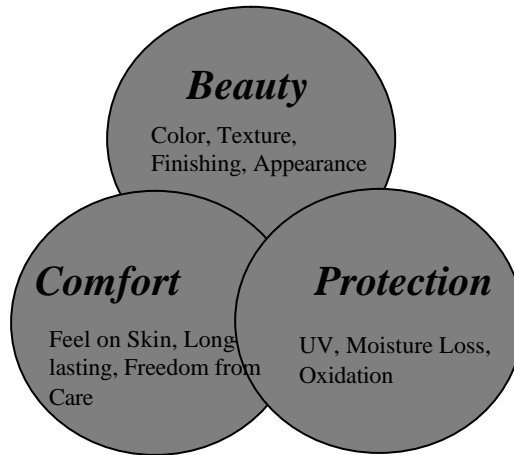
- .Customer research
- .Technical PR
- .Product development support for EU market

**Contribute business in worldwide**

- .Research of efficacy and claim
- .EU regulation (information collection and response)
- .Study EU competitors and analyze their product

**Representative Research on Makeup in the Past**

**Concept for Makeup Development**



**Representative Research on Makeup in the Past**

- (1) Photo Chromic Powder
- (2) Skin Care Powder
- (3) Therapy Make up Technology

# Photo Chromic Powder



**“Anti.UV” Effect**

**“Anti Too white in outside” Effect**



After UV irradiation

# Effect of Photo Chromic Powder

With Photo Chromic Powder      Placebo

Outside



“Anti.UV” Effect

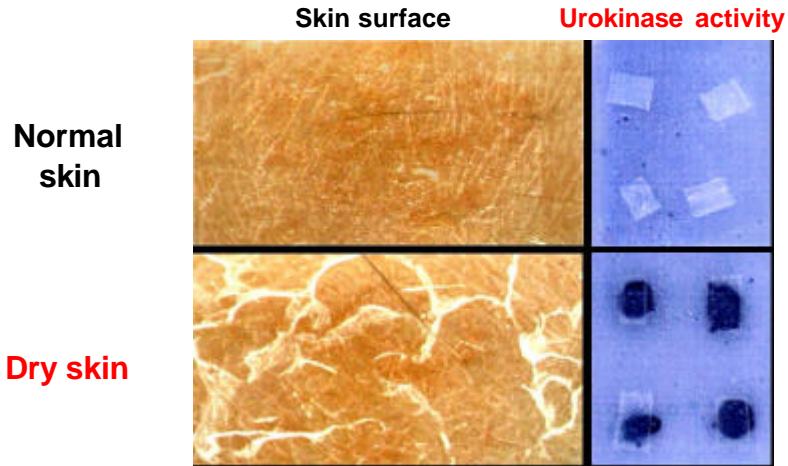
“Anti Too white in outside” Effect

In the Office



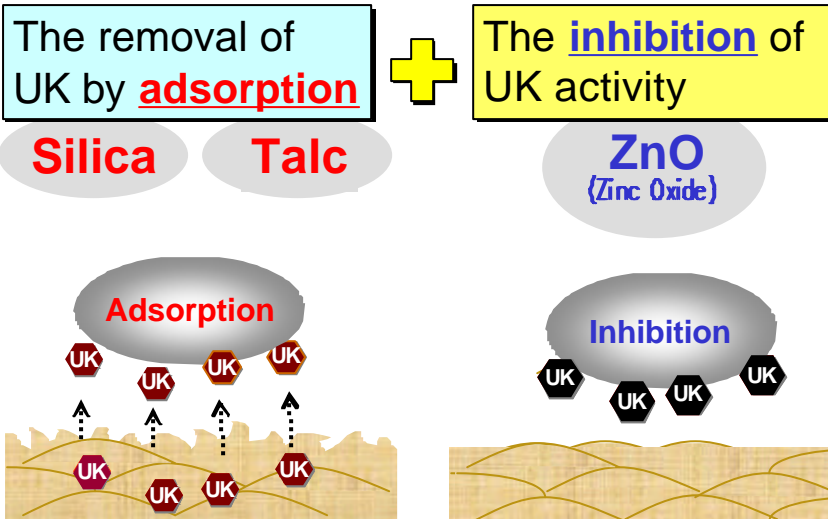
**Skin Care Powder**

## Urokinase activity on the outermost layer of the stratum corneum



Urokinase activity was detected in the surface of dry skin.

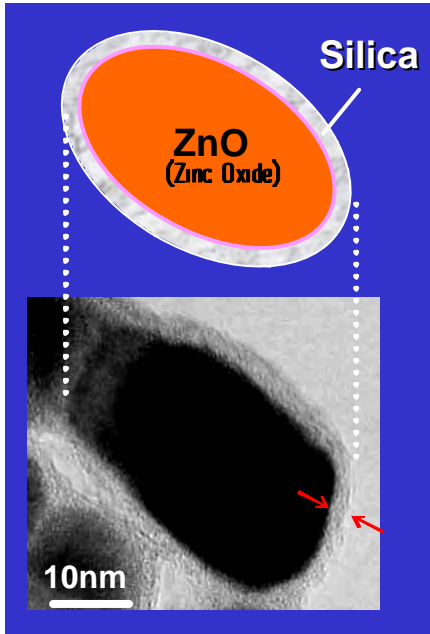
## Novel "Skin Care" Powder which has effect to alleviate skin roughness



I. INTRODUCTION

SHISEIDO

**Skin Care Powder**



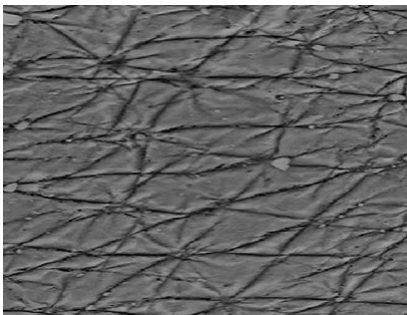
**Application for Powdery Foundation**

I. INTRODUCTION

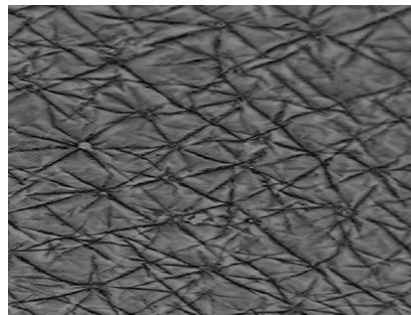
SHISEIDO

**Novel “Skin Care” Powder  
which has effect to alleviate skin roughness**

**Daily use for 2months in winter (double masked trial) N = 50**



**Control  
Powdery Foundation**



**With Skin Care Powder  
Powdery Foundation**

# Therapy Make up

## Therapy Make up Technology

**Natural  
Concealing  
technique by  
interference light**



light



pigments

**Ota's nevus**

**Capillary hemangioma**



Without make up

With make up



Without make up

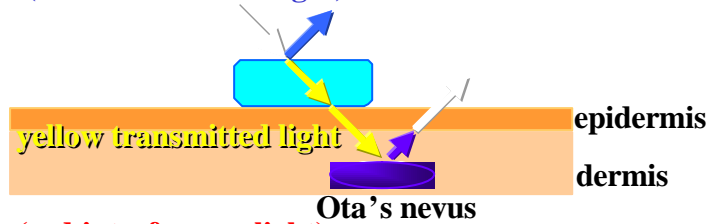
With make up



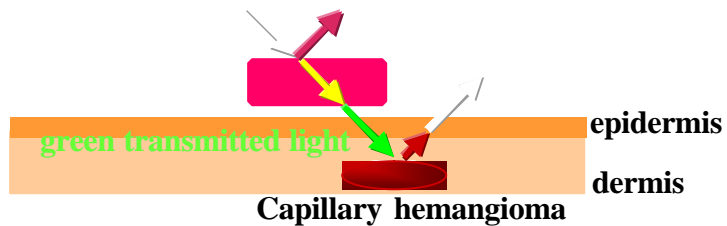
*Green Light Diminishes Orange Color*  
Complementary light cancels color

**Application of TiO<sub>2</sub>-mica on the skin**

**TiO<sub>2</sub>-mica (blue interference light)**



**TiO<sub>2</sub>-mica (red interference light)**



**Vivid blue and red colors changed mild respectively**

## 2. Latest Cutting Edge Technology

### (1) Lipstick (*SHIMMERING LIPSTICK*)

- Treatment Effect
- Blood Circulation Effect

### (2) Foundation (*Dual Balancing Foundation*)

- Makeup 3-D Effect
- Skincare Moisturizing Effect

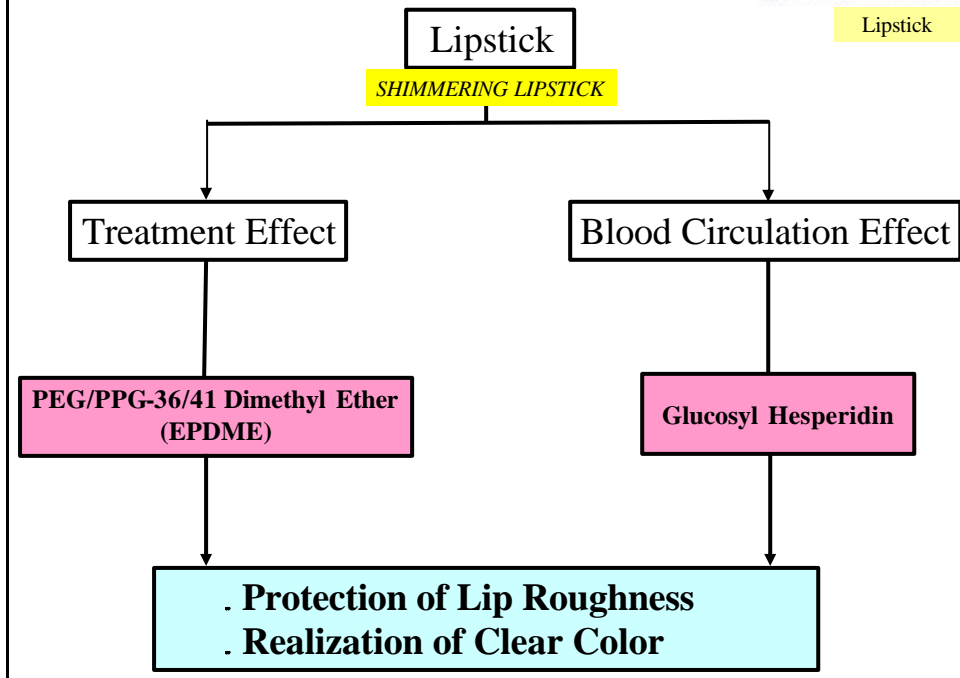
## 2. Latest Cutting Edge Technology

### (1) Lipstick (*SHIMMERING LIPSTICK*)

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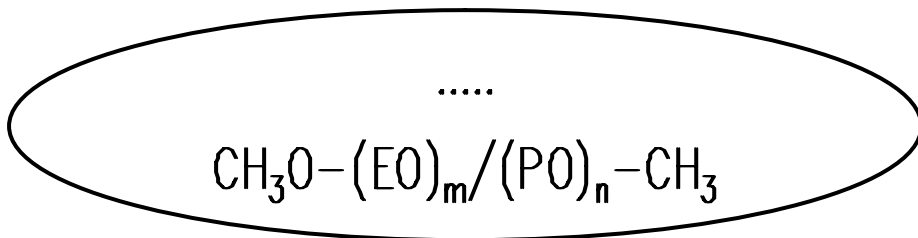
- Makeup 3-D Effect
- Skincare Moisturizing Effect



**EPDME** .Skin Care Effect.

Structure of EPDME

(POE/POP) Dimethyl Ether  
POE/POP random copolymer



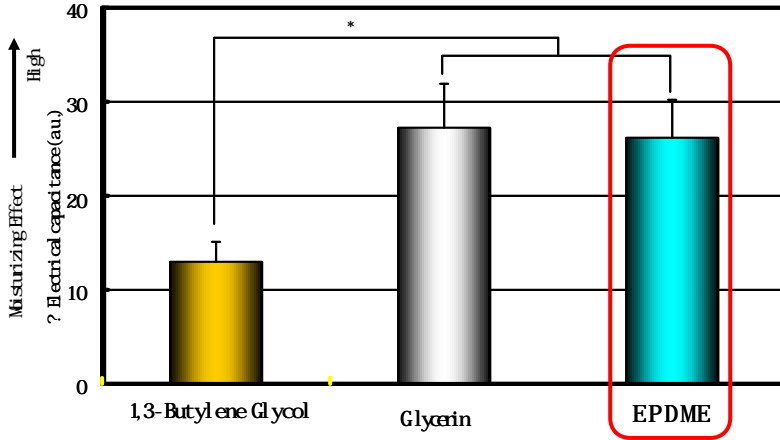
Characteristic: Oil & Water soluble transparent liquid

■ E0  
■ PO

EPDME .Skin Care Effect.

Moisturizing Effect (in vivo)

Lipstick  
Treatment Effect

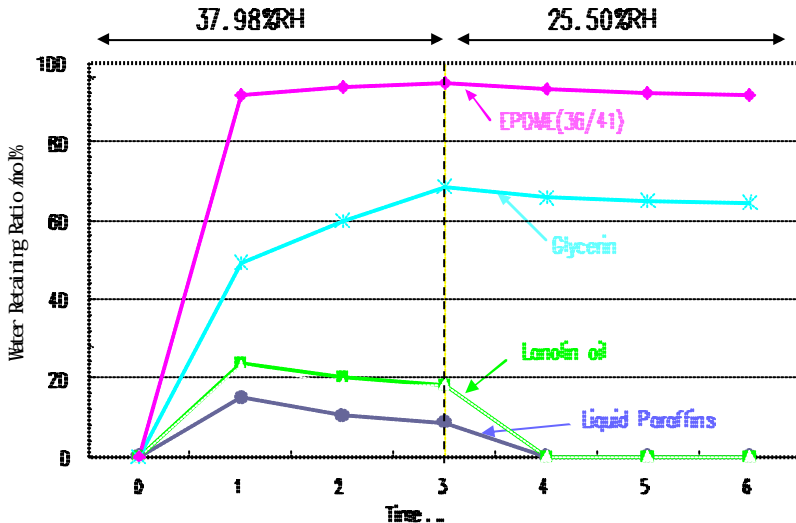


EPDME is Oil & Water Soluble humectant.  
EPDME can be applied for lipsticks whose base is oil.

EPDME .Skin Care Effect.

Water Retaining Effect (in vitro)

Lipstick  
Treatment Effect



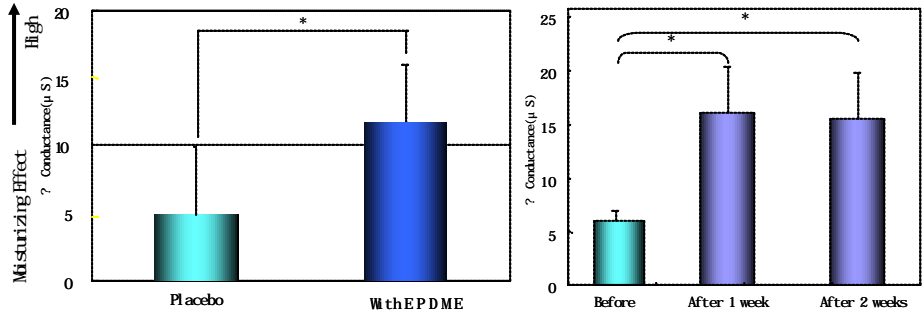
# EPDME .Skin Care Effect.

Lipstick  
Treatment Effect

## Moisturizing Effect (in vivo)

### Moisture on the Lip

N=6 Mean±SE  
Student's t test \* p<0.05

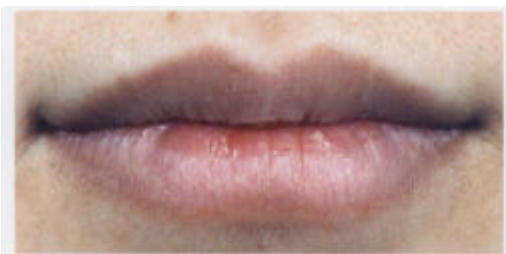


# EPDME .Skin Care Effect.

Lipstick  
Treatment Effect

## Improvement Examples

Before.  
Noticeable  
roughness and wrinkles  
on lips



After.  
Improved  
roughness and wrinkle  
on lips



# Glucosyl Hesperidin .Skin Care Effect.

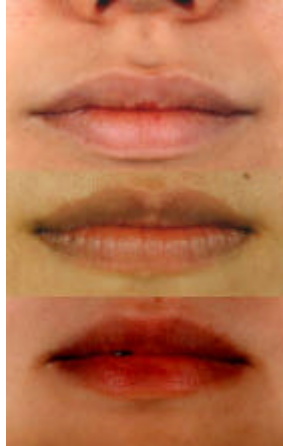
## Appearance of Lips

Lipstick  
Blood Circulation

### Normal Lip Color



### Dull Lip Color



Whitish

Darkish

Violet

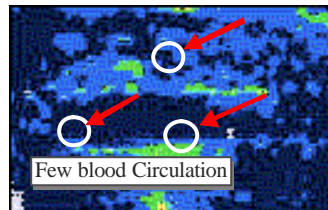
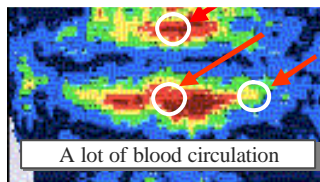
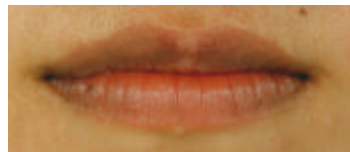
**There are various lip colors.**

# Glucosyl Hesperidin .Skin Care Effect.

## 2D Laser Picture for Blood Circulation

Lipstick  
Blood Circulation

### Dull Color Lips



**Dull color lips have low blood circulation.**

# Glucosyl Hesperidin .Skin Care Effect.

Lipstick

Blood Circulation

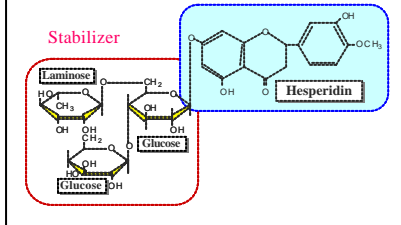
Improvement of Blood Circulation

Assured Safety

Dissolubility

## Glucosyl Hesperidin

### Chemical Structure



### Function

- .To strengthen capillary
- .To increase transparency of blood vessels
- .To decrease blood pressure

# Glucosyl Hesperidin .Skin Care Effect.

Lipstick

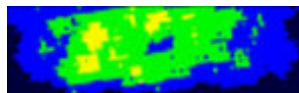
Blood Circulation

## Blood Circulation Enhancement Effect (in vivo)

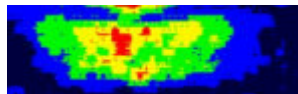
### Blood Circulation Change

.by Laser Doppler Blood Flow Measuring System.

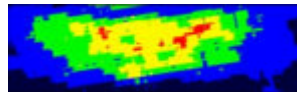
<Before>



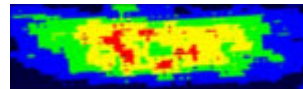
<in 30 minutes>



<in 60 minutes>



<in 120 minutes>

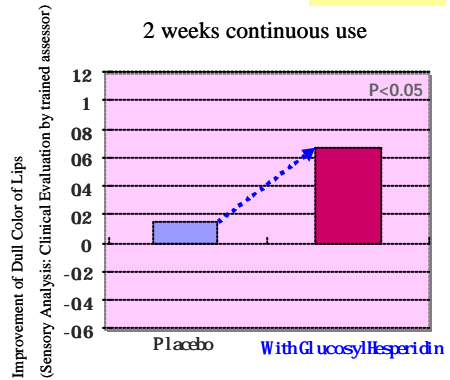
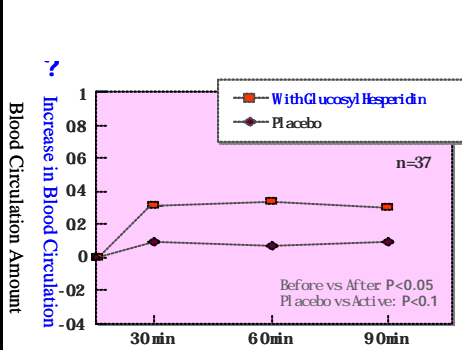


After application of lipstick, blood circulation has been increased.

**Green.Yellow.Red**

# Glucosyl Hesperidin Skin Care Effect.

Lipstick  
Blood Circulation



**Dullness of lip has been improved by continuous usage of lipstick with Glucosyl Hesperidin.**

# Glucosyl Hesperidin Skin Care Effect.

Lipstick  
Blood Circulation

## Application Test for Two Weeks

<Before>

<in 2 Weeks>

Panel 1



Panel 2





## 2. Latest Cutting Age Technology

(1) Lipstick (*SHIMMERING LIPSTICK*)

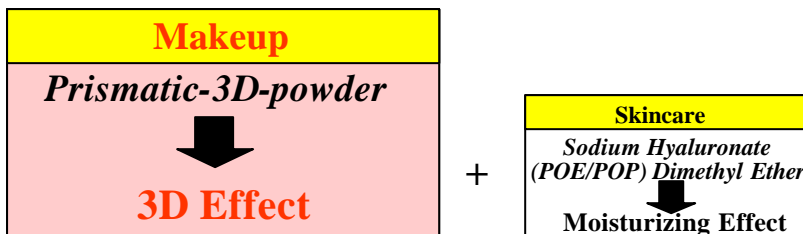
- Treatment Effect
- Blood Circulation Effect

(2) Foundation (*Dual Balancing Foundation*)

- Makeup 3-D Effect
- Skincare Moisturizing Effect

### 2. LATEST CUTTING AGE TECHNOLOGY

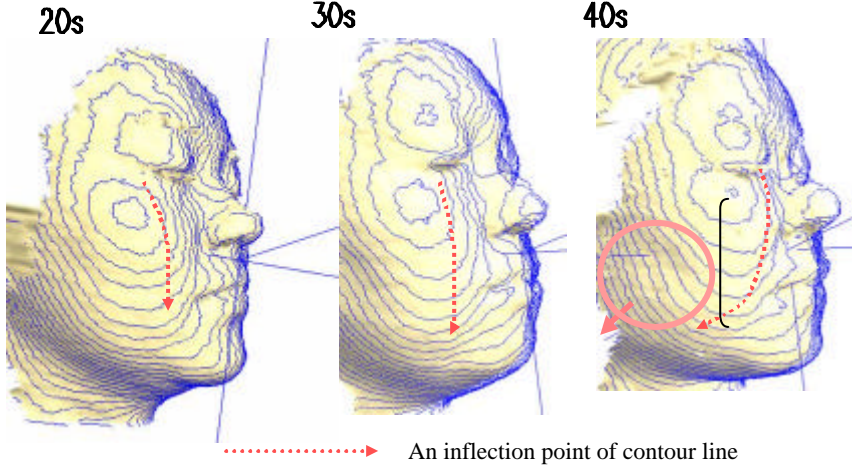
SHISEIDO The Makeup -Dual Balancing Foundation-



# Prismatic 3D-Powder .3D Effect.

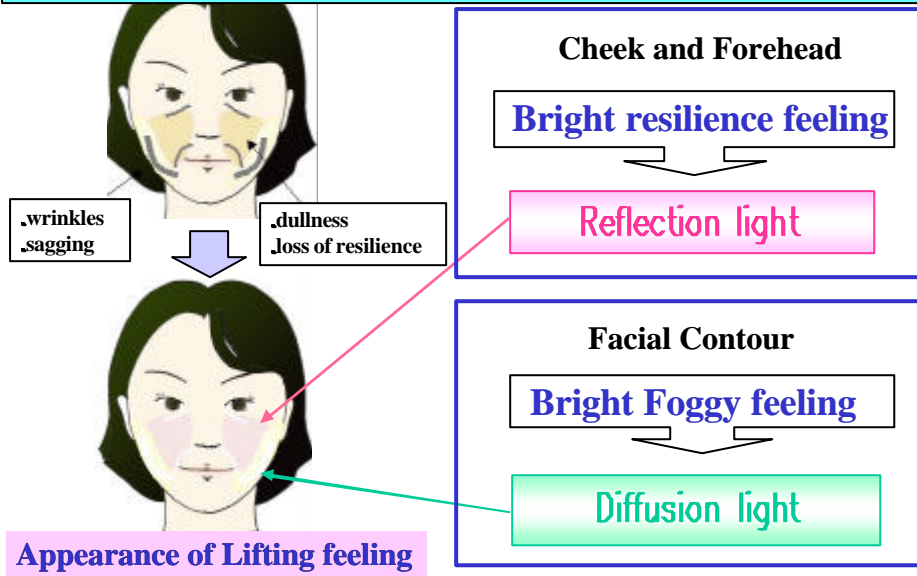
## Appearance of facial sagging

Results of 3D measurement (Facial Contour Map)



# Prismatic 3D-Powder .3D Effect.

## Strategy for correction of sagging and loss of resilience by optical technique





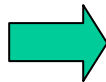
# Prismatic 3D-Powder .3D Effect.



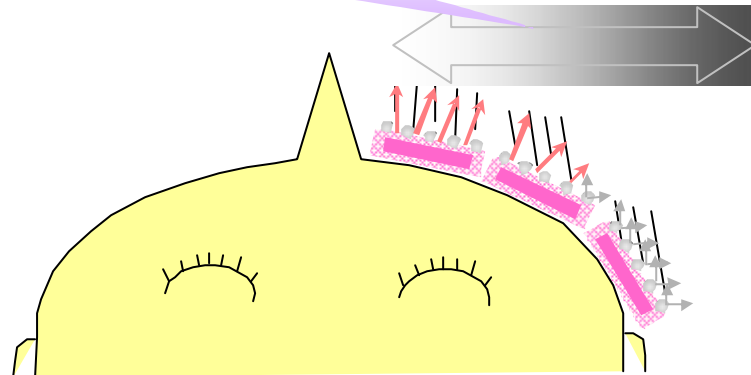
# Prismatic 3D-Powder .3D Effect.

Mechanism of 3D

The Contrast of brightness is big.



Appearance of Lifting feeling



# Prismatic 3D-Powder .3D Effect.

## Control of the light contrast

Light hits straightly

Light hits diagonally



**T-zone**  
Prismatic 3D-powder  
Shines brightly  
By reflecting straightly



**U-zone**  
Prismatic 3D-powder  
Tones down brightness  
By diffusing



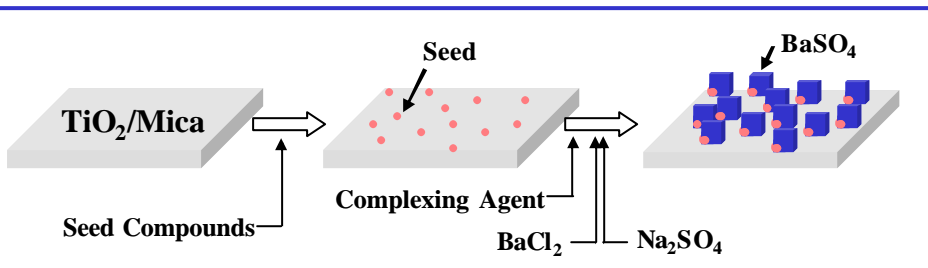
# Prismatic 3D-Powder .3D Effect.

## Development of hybrid powders by NANO technology

**SHISEIDO exclusive**

hybrid powders synthesized by shape-controlled coating method

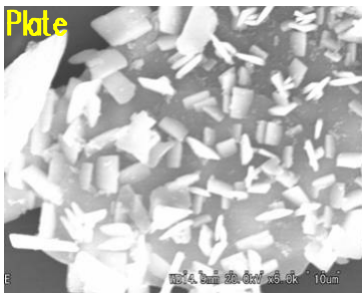
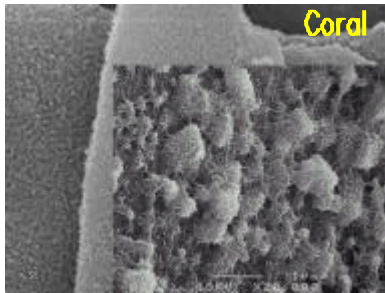
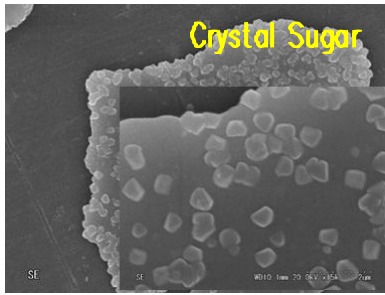
~ Patent Pending ~



## Reaction Model ( ex. BaSO<sub>4</sub> )

**Shape-controlled coating technique in nano-level**

hybrid powders synthesized by shape-controlled coating method



2. LATEST CUTTING AGE TECHNOLOGY

SHISEIDO

Prismatic 3D-Powder .3D Effect.

How big is the optical particle size?

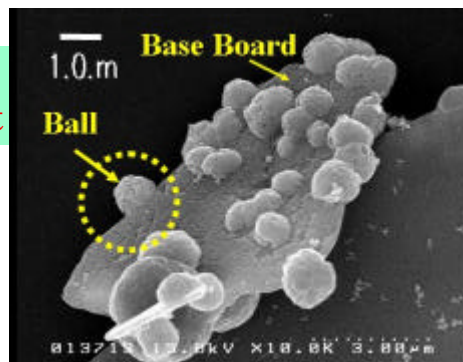
Mitton's formula

$$d_{opt} \approx 1.414 \cdot \frac{m^2 + 2}{m^2 - 1} \cdot n_b \cdot \lambda$$

$m = n_p / n_b$   
 $n_p$  - refractive index of pigment  
 $n_b$  - refractive index of conductor  
 $\lambda$  - wave length of light

The formula shows the maximum diffusion of light

Optical Particle Size  
1.0.1.5.μm

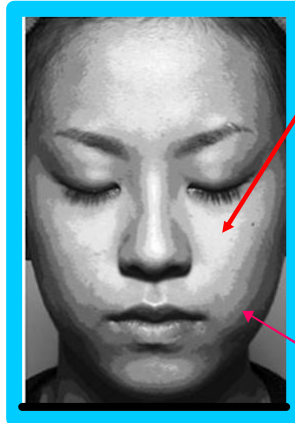


# Prismatic 3D-Powder .3D Effect.

## Proof Photo



Placebo



With Prismatic  
3D-powder

Light



Dark

## SHISEIDO The Makeup -Dual Balancing Foundation-

### Makeup

*Prismatic-3D-powder*



**3D Effect**

+

### Skin Care

*Sodium Hyaluronate  
(POE/POP) Dimethyl Ether*

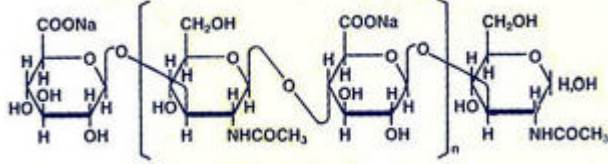


**Moisturizing Effect**

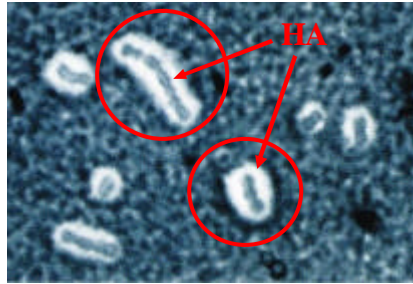


# Sodium Hyaluronate .Moisturizing Effect.

## Sodium Hyaluronate (HA).BIO-Moisturizing Factor



*Streptococcus Zooepidemicus #104*

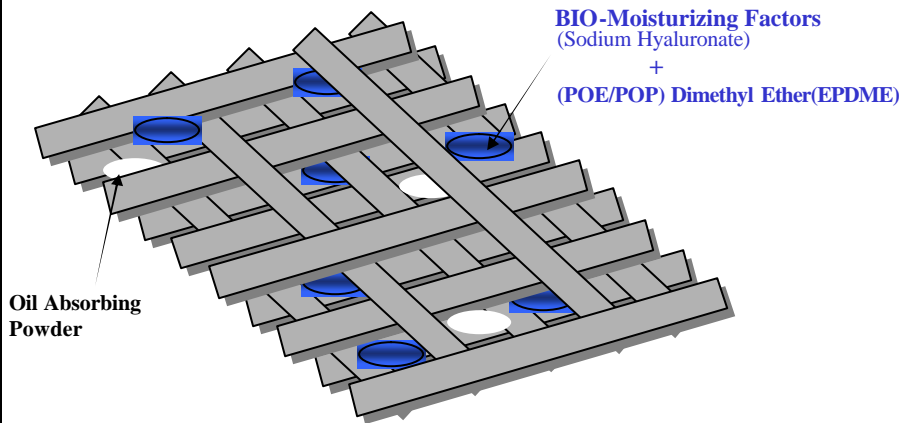


**Fermentation Method (=Animal Free)**

## Skincare Effect

Foundation  
Moisturizing Effect

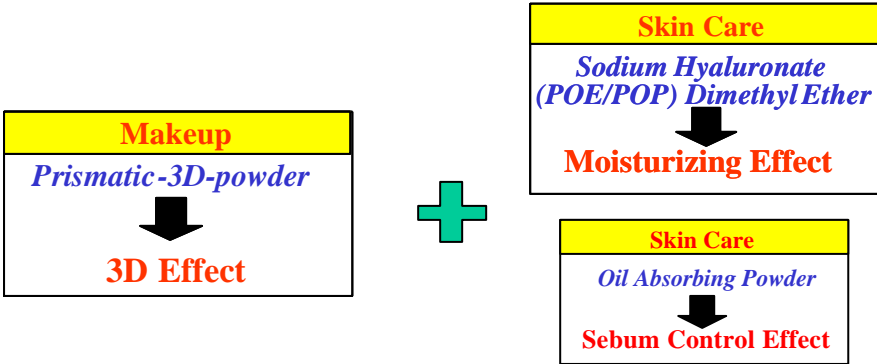
### Optimal Balance Network



Dual Balancing Foundation



SHISEIDO The Makeup -Dual Balancing Foundation-



SHISEIDO The Makeup - New Products-

This advertisement features a yellow rounded rectangle at the top containing:

- Automatic Lip Crayon:** A row of six lip crayons.
- Lip Gloss:** A single tube of lip gloss.
- Ingredients:** Two pink-bordered boxes containing 'Sodium Hyaluronate' and 'Glucosyl Hesperidin'.

Below this, a purple oval contains the text 'Skincare Effect'. Underneath that, a pink-bordered box contains '(POE/POP) Dimethyl Ether (EPDME)'. At the bottom, two product images are shown:

- Silky Eye Shadow Quad:** Two eye shadow quads.
- Accentuating Cream Eyeliner:** Two tubes of cream eyeliner.



SHISEIDO