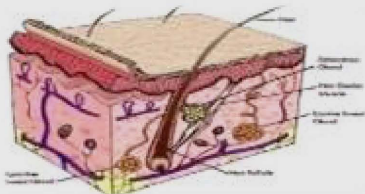
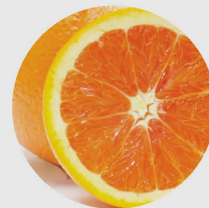
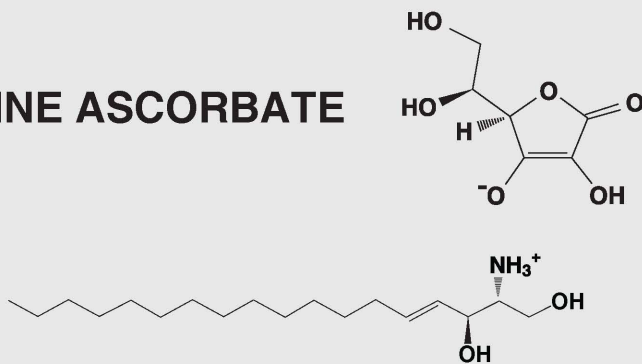


SP-VC

PHYTOSPHINGOSINE ASCORBATE



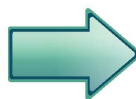
Sphingosine
Skin-composing element



Vitamin C (Ascorbic acid)
Skin-vitalizing element

Molecular Formula : $C_{24}H_{47}O_9N$
Molecular Weight : 493.6
CTFA file No. : 12335

Analysis of
acne improvement
effect of SP-VC



Multiple benefits
of vitamin C &
phytosphingosine

Owing to the fact that SP-VC is the composite originated from natural phytosphingosine and Vitamin C.

SP-VC (Phytosphingosine ascorbate)

Efficiency

- Multi-effects of phytosphingosine and vitamin C
- Anti-Oxidation effects, anti-Inflammation effects
- Anti-Bacterial effects, anti-acne effects
- Skin barrier recovery effects and wound healing effects, etc.

Anti-Oxidation effects

- inhibition of free fatty acid due to acidifying sebum
- control the inflow speed of antibiotic into inflammation part → prevention of skin discoloration

Anti-inflammation effect

- inhibition of inflammation in diseased part
- prevention of excessive cornification of skin

Anti-bacterium effect

- high anti bacterium effect on *P. acne* / *Staphylococcus*



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APPLIED CONTENTS

ITEM	MIC	IC 50
SP-VC Efficacy concentration	0.004% (25~40ppm)	0.0006% (6ppm)
SP-VC Applicable concentration	0.04%	0.006%
Recommending concentration	(0.05 ~ 0.1% SP-VC)	(0.0075% SP-VC)

APPLICATION

Applicable for various skin care products

Primary materials for skin ailment products such as acne and atopic dermatitis

Supplementary materials for anti-aging & whitening, etc.

SOLUBILITY

in water : <0.02% (40~45°C heating)

in other ingredients: 1,3-BG, PG, Fatty alcohols, Ethanol

Stability of drying powder : stable at room temperature at least 2 years

STORAGE CONDITION

Cold storage : about 4 ~ 15 degrees

SPECIFICATION

ITEM	SPECIFICATION
Appearance	White to off white powder
Odor	Practically odorless
Melting Point by DSC	154 ~ 155°C
HPLC	min. 99%
Loss on Drying	max. 1.0%
Heavy metal(ppm)	max. 20
As(ppm)	max. 2



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