# Amitose VC series

New moisturizing vitamin C derivatives "Glyceryl ascorbate series"

- SEIWA original ingredient developed by combining vitamin C and glycerin
- High stability enables various formulae containing VC derivatives
- Amitose VC series has each specific efficacy in addition to VC properties

## Rich-moisturizing vitamin C Amitose DGA

Non-ionic VC derivative having water-soluble character. It enables to develop gel and cream formulae containing VC derivative that was difficult to make before.





Basic type

derivative.

#### **Anti-aging vitamin C**

# Amitose 3GA

VC derivative approaching "anti-aging" from various angles. Because of cost benefit, it is suitable for the development of special formulae containing high-concentration of VC

# **Emulsifying vitamin C** Amitose MGA

Moisturizing vitamin C

Amitose 2GA

VC derivative having an unprecedented

excellent sensory texture. It enables to make cosmetic formulae in

the wide pH range.

VC derivative having an unprecedented oil-in-water emulsifying ability and antibacterial activity. It enables to develop innovative emulsified cosmetics.



dvanced

**Lightening vitamin C** 

### Amitose HGA

VC derivative having inhibitory effect on melanin transport to the keratinocyte and autophagic degradation It gives top-class excellent skin-lightening





#### **Ceramide promoter** *Amitose 3LGA*

VC derivative having an activating effect of ceramide synthesis by enhancing intracellular anti-oxidant system. It protects skin from inner and outer stress.

# Amitose VC series Product lineup

New moisturizing vitamin C derivatives "Glyceryl ascorbate series" created by the fusion of vitamin C and glycerin

Туре		Basic type			Advanced type		
Product name		Amitose DGA	Amitose 3GA	Amitose 2GA	Amitose HGA	Amitose MGA	Amitose 3LGA
Advantage		<ul> <li>Easy to be formulated in gel and cream formulae</li> <li>Rich moisturizing by stratum corneum barrier</li> </ul>	Cost benefit     Antioxidant effect	Comfortable sensory texture     Long-term stability	Excellent skin lightening effect     Interfering of melanin transport     Melanin degradation by autophagy	Oil in Water type emulsifying ability Antibacterial activity* *Anti-acne activity etc.	Improvement of sensitive skin     Activating ceramide synthesis     Anti-pollution
Product information	Chemical structure	MW: 324	MW: 250	MW: 250	MW: 334	MW: 446  HO HO O Myristyl HO Alkyl Group Glycerin	MW: 419 HO HO OH Alkyl Group Glycerin
	INCI name	Bis-Glyceryl Ascorbate, Glycerin, Water	3-Glyceryl Ascorbate, Glycerin, Water	Glyceryl Ascorbate	Hexyl 3-Glyceryl Ascorbate, Glycerin, Water	Myristyl 3-Glyceryl Ascorbate, Butylene Glycol	3-Laurylglyceryl Ascorbate, Butylene Glycol
	Concentration of active component	50%	30%	100%	20%	10%	10%
	Appearance	Liquid	Liquid	Powder	Liquid	Liquid	Liquid
	Storage condition	Keep refrigerated	Keep refrigerated	Room temperature	Keep refrigerated	Keep refrigerated	Room temperature
	Physical property	Water-soluble	Water-soluble	Water-soluble	Water-soluble	Amphiphilic	Amphiphilic
		Non-ionic	Weak-anionic	Anionic	Non-ionic	Non-ionic	Weak-anionic
	Suggested pH condition	3 - 6	2-5	6-9	3-6	3-6	3-6
Applications	Skin toner	***	***	***	***	*	**
	Cream	***	**	*	***	***	***
	Gel	***	**	*	***	**	**
	Vitamin C-rich serum	***	***	**	*	*	*
Features	Suppression of melanin production	**	**	**	***	***	***
	Enhancement of collagen production	*	*	*	*	**	**
	Intracellular antioxidant effect	*	**	*	*	*	***
	Activation of ceramide synthesis*	_	<u>–</u>	<u>–</u>	_	_	***
	Moisturizing effect	***	**	**	**	**	***
	Antibacterial effect	_	_	_	*	***	*

[Applications] ★-★★; More ★marks indicate that it is more suitable for each type of formulae.

Features] \*- \*\*\*; More \*marks indicate that it has more excellent effects. "—" mark indicates that it has no data or effect.

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<sup>\*</sup> Activation of ceramide synthesis thanks to scavenging ROS which suppresses the production of ceramide synthetase by enhancing intracellular anti-oxidant system.