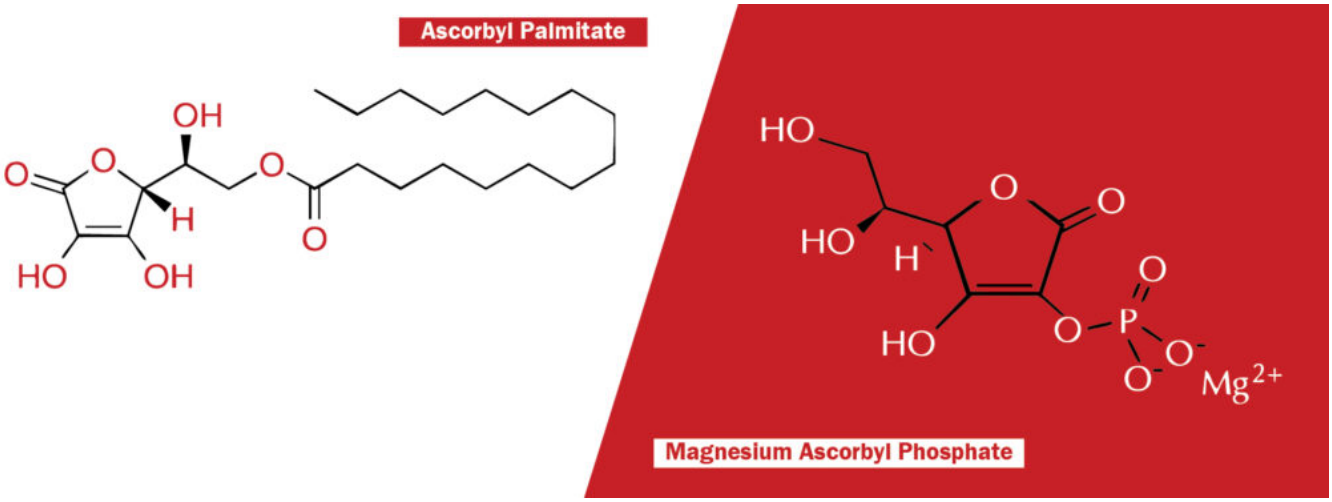


Though the health benefits of Vitamin C have been known since the 1940s, it was only in the 1970s that scientists began studying the effects of topical vitamin C on skin. The focus was on its potential to reduce signs of ageing and improve skin texture.

In the 1980s, formulation techniques were developed to prevent discolouration caused by exposure to UV light and oxygen. Ascorbic acid became more commonly used in skincare formulations.

The first commercial vitamin C serums were launched in the 1990s, leading to increased consumer awareness and demand. Cosmetic scientists explored new derivatives of vitamin C, such as ascorbyl palmitate and magnesium ascorbyl phosphate, which offered stability and efficacy. **Vitamin C derivatives penetrate the skin and only metabolise in the skin to release vitamin C – they are more stable and show better efficacy than pure ascorbic acid.**

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In the 2000s, research continued to establish the benefits of vitamin C for the skin, including its role in collagen synthesis and protection against UV damage. Various formulations became available, including creams, serums, and emulsions.

From 2010 to today, the popularity of vitamin C in skincare has soared, with **numerous studies confirming its antioxidant and anti-ageing properties**. Innovators in cosmetic chemistry continue to develop advanced formulations that enhance absorption and stability, such as liposomal vitamin C and water-free formulations.

We know that vitamin C improves even skin tone by inhibiting the tyrosinase activity in the skin, thereby decreasing the formation of melanin. It reduces wrinkles and fine lines and enhances skin lightening, radiance, and collagen production. **It is a powerful antioxidant and reduces sun damage on the skin.**

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While the scientific benefits of Vitamin C are well-documented, its widespread adoption across the skincare industry is also driven by **consumer demand and market trends**. The modern skincare user is more **ingredient-conscious**, researching products and formulations before making a purchase.

Vitamin C is now regarded as one of the most effective **multi-functional** ingredients in skincare. It caters to both **preventative and corrective** needs—protecting against external aggressors like UV damage and pollution while also brightening the skin and improving collagen synthesis.

Social media has further propelled its popularity. **Influencer marketing, dermatologist endorsements, and viral skincare trends** have all played a role in establishing Vitamin C as a must-have ingredient. Searches for "best Vitamin C serums" continue to rise, proving its strong foothold in the industry. For businesses formulating skincare products, the challenge is no longer just incorporating Vitamin C—it’s about ensuring **stability, potency, and long-term effectiveness** in formulations.

The stability Challenge:

[redacted]

While Vitamin C offers unparalleled skincare benefits, its biggest drawback has always been **stability**. Pure ascorbic acid is highly unstable and degrades quickly when exposed to light, air, and heat. This is where **Vitamin C derivatives** come into play.

New-generation Vitamin C ingredients offer:
[redacted] – Preventing oxidation and maintaining potency over time [redacted] – Allowing deeper absorption for enhanced efficacy [redacted] – Compatible with a wider range of formulations and pH levels ***We have*** [redacted]

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TRADE NAME	INCI NAME	APPEARANCE	SOLUBILITY IN	pH RANGE	DOSAGE %
Ethyl ascorbic acid **	3-0-ethyl ascorbic acid	Powder	Water	5.5-7.0	0.1-3.0
Magnesium ascorbyl phosphate **	Magnesium ascorbyl phosphate	Powder	Water	7.0-8.5	0.5-3.0
Sodium ascorbyl phosphate	Sodium ascorbyl phosphate	Powder	Water, glycerol, propylene glycol	6.5	0.2-5.0
Ascorbyl glucoside	Ascorbyl glucoside	Powder	Water	5.5-7.0	0.1-2.0
Ascorbyl tetraisopalmitate	Ascorbyl tetraisopalmitate	Liquid	Oil	<6	0.1-5.0

[redacted]

Using these ingredients with buffers and antioxidants is advisable to ensure stability and prevent discolouration. All these vitamin C derivatives are available from Cosmetic Ingredients – these are supplied to us by Selco-GfN.

We also offer **multi-functional Vitamin C derivatives** from our supplier, Seiwa Kasei, which will be covered in our next blog.

[redacted]

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The evolution of Vitamin C formulations will continue as **new delivery systems and stabilisation techniques emerge**. Water-free and encapsulated Vitamin C formulas are gaining traction, offering enhanced efficacy and longer shelf life.

For formulators and brands looking to stay ahead, **choosing the right derivative is essential**. With consumers demanding **high-performance skincare backed by science**, the future belongs to brands that prioritise efficacy, stability, and innovation.

At ***Cosmetic Ingredients***, we are committed to providing cutting-edge raw materials that meet the highest industry standards. If you're looking to integrate the latest Vitamin C technology into your formulations, contact us today.

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