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Vitamin C (magnesium ascorbyl phosphate)

Specification Sheet

Description: Very stable vitamin C derivative (L-Ascorbic acid mono-dihydrogen phosphate magnesium salt) that does not degrade in formulas containing water. Light-stable and oxygen-stable. Purity >98.0%. White-yellowish powder, mild odor. Soluble in water (154g/l at 25 °C corresponding to about 15%), may discolor in pH <6, best when used in emulsion-based products at pH between 5.5-7.

CAS: 114040-31-2 (also 113170-55-1, 108910-78-7)

INCI Name: Magnesium ascorbyl phosphate

Benefits:

- Stabilized and degradation resistant form of vitamin C
- Potent antioxidant (shown to be able to protect skin from oxidative damages)
- Can improve appearance of aged and fragile skin
- Widely used as add-on ingredient in skin-lightening products to correct hyperpigmentation and age spots
- Antioxidant effect can be increased by combining Magnesium Ascorbyl Phosphate with L-ascorbic acid and/or vitamin E

Use: Add at the end of the formulation process just before the preservative, by pre-dissolving in little distilled water. Usual concentration 0.2-3%, but up to 10% (for skin-lightening effect). For external use only.

Applications: Lotions, creams, sun care & after sun products, makeup products.

Country of Origin: UK & China

Raw material source: L-ascorbic acid, magnesium, and phosphoryl chloride (or other phosphorylating agents)

Manufacture: Magnesium ascorbyl phosphate is produced by direct phosphorylation of ascorbic acid magnesium salt where l-ascorbic acid is suspended in an oxygenated, non-hydroxylic solvent together with magnesium and then treated with a phosphorylating agent.

Animal Testing: Not animal tested

GMO: GMO free (does not contain plant-derived components)

Vegan: Does not contain animal-derived components