

## 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%. May discolor at pH <6. Best when used in emulsion-based products at pH between 5-7.

**CAS:** 113170-55-1

**INCI Name:** Magnesium ascorbyl phosphate

**Composition:** Magnesium ascorbyl phosphate

**Appearance:** White to off white powder, odorless.

**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. Typical use level 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.

**Solubility:** Soluble in water (154g/l corresponding to about 15%)

**Preservation:** Preservative-free

**Storage:** Store light-protected at a cool and dry place.

**Country of Origin:** China

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



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**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

**Vegan:** Does not contain animal-derived components.

**HS Code:** 2936270000