

TECHNICAL DATA SHEET (TDS)

Product Name

Magnesium Ascorbyl Phosphate (MAP)

INCI Name

Magnesium Ascorbyl Phosphate

CAS Number

113170-55-1

Product Type

Water-soluble Vitamin C derivative

1. Description

Magnesium Ascorbyl Phosphate is a stable, water-soluble derivative of ascorbic acid. It offers antioxidant protection and skin-brightening properties while being less irritating than pure ascorbic acid.

It performs optimally at neutral pH levels (6–7).

2. Physical Properties

Parameter	Specification
Appearance	White powder
Odor	Odorless
Solubility	Soluble in water, glycerin, propylene glycol
Recommended pH	6.0 – 7.0

3. Cosmetic Function

- Antioxidant
- Skin brightening

- Anti-aging
- Collagen support
- Sebum-regulating support

4. Recommended Use Levels

0.2 – 5% depending on product type.

5. Formulation Guidelines

- Add to water phase below 40°C
- Ensure final formulation pH is adjusted to 6–7
- Avoid highly acidic systems
- Compatible with most humectants and emulsifiers

6. Storage

Store in tightly closed container.
Protect from moisture and light.

Shelf life: 24 months.