



TECHNICAL DATA SHEET

Product Name: Magnesium Citrate (Anhydrous & Nonahydrate)

Chemical Name: Magnesium Citrate

Synonyms: Citric acid magnesium salt

Molecular Formula:

Anhydrous: $C_6H_5MgO_7$

Nonahydrate: $C_6H_5MgO_7 \cdot 9H_2O$

CAS No.:

Anhydrous: 3344-18-1

Nonahydrate: 144-23-0

EINECS No.:

Anhydrous: 222-093-9

Nonahydrate: 205-616-4

E Code (Food Grade): E345

SPECIFICATION

Description	White to off-white powder	White crystalline powder
Identification	Positive for Magnesium & Citrate	Positive for Magnesium & Citrate
Assay (as Mg)	14.5% – 16.4%	14.5% – 16.4%
pH (5% solution)	5.0 – 9.0	5.0 – 9.0
Heavy Metals	≤ 10 ppm	≤ 10 ppm
Arsenic	≤ 1 ppm	≤ 1 ppm
Lead	≤ 1 ppm	≤ 1 ppm
Oxalate	≤ 0.3%	≤ 0.3%
Chloride	≤ 0.05%	≤ 0.05%
Sulfate	≤ 0.2%	≤ 0.2%
Loss on Drying	≤ 2.5%	≤ 29%
Solubility (5% in water)	Soluble	Soluble

APPLICATION

Food Grade:

Used as a **magnesium supplement** in nutritional and dietary applications, effervescent tablets, and beverages.

Industrial Grade:

Used in water treatment, cosmetics, detergents, and buffering agents.

STORAGE & HANDLING

Store in a **cool, dry, and well-ventilated** area away from moisture and incompatible substances.

Keep container tightly closed.



Use **clean equipment** and **avoid cross-contamination** for food-grade handling.

SAFETY & TRANSPORT

Not classified as hazardous for transport (non-dangerous goods).

Handle with standard protective equipment (gloves, dust mask).

Avoid contact with eyes and inhalation of dust.

Complies with **GHS** safety labeling requirements.