### **TECHNICAL DATA SHEET**

**Product Name:** Calcium Magnesium Citrate **Supplier:** Jiangsu Khonor Chemicals Co., Limited

## 1. Product Description:

**Calcium Magnesium Citrate** is a white or off-white powder or granular compound composed of calcium and magnesium salts of citric acid. Known for its **superior bioavailability**, **gentle digestion**, and **excellent solubility**, it is widely used in premium nutritional products for all age groups.

This product is **fully customizable**:

**Particle size** can range from coarse granules to **ultrafine powder** suitable for suspension in liquids.

**Calcium-to-magnesium ratio** can be tailored to meet specific nutritional requirements.

It is ideal for use in **liquid calcium-magnesium nutritional drinks**, especially for **children and teenagers**, where high absorption and taste-masking are critical.

# 2. Chemical Properties:

Parameter	Specification
Appearance	White or off-white powder/granule
Calcium Content (as Ca)	13.0% – 15.0% (Customizable)
Magnesium Content (as Mg)	3.5% – 4.5% (Customizable)
pH (1% solution)	5.0 – 7.5
Solubility	Partially soluble in water
Mesh Size	20–100 mesh or ultrafine powder
Loss on Drying	≤ 10.0%
Heavy Metals (Pb)	≤ 10 ppm
Arsenic (As)	≤ 1 ppm
Total Plate Count	≤ 1,000 CFU/g
Yeast & Mold	≤ 100 CFU/g
Salmonella / E. coli	Negative

## 3. Customization Options:

Mesh Size: Available as coarse powder (20–60 mesh), fine powder (80–100 mesh), and ultrafine powder (<200 mesh) for liquid product applications Calcium-Magnesium Ratio: Custom ratios such as 2:1, 3:2, 1:1, or per customer request

#### 4. Applications & Usage:

### ➤ Application Areas:

Nutritional supplements (powders, tablets, capsules, sachets) **Liquid calcium-magnesium supplements** for pediatric or teenage nutrition

Functional foods and fortified beverages

Sports and recovery formulas

Medical and pharmaceutical nutrition

## ➤ Usage Effects & Benefits:

**Bone development:** Enhances bone density and growth in adolescents **Muscle & nerve function:** Supports smooth muscle contraction, relaxation, and nerve signal transmission

**Digestive tolerance:** Citrate form is better tolerated than carbonates or oxides

**No side effects:** Does not cause constipation or stomach discomfort **Rapid absorption:** Especially in liquid form with ultrafine grade

## ➤ Ideal for:

**Children and teenagers** with high calcium demand for bone growth **Elderly individuals** with reduced calcium absorption

Pregnant and breastfeeding women

Athletes requiring mineral replenishment

People with sensitive digestive systems

### ➤ Suggested Dosage:

Adults: 500-1000 mg elemental calcium & 250-500 mg magnesium per day Youth (6–18 years): 500-800 mg calcium + 200-400 mg magnesium, or as recommended

Actual dosage depends on local regulations and formulation targets

# 5. Packaging:

25 kg kraft paper bag or fiber drum with PE liner Custom packaging available upon request (small packs, sachets, OEM/ODM)

#### 6. Shelf Life:

24 months in sealed original packaging under proper storage conditions

### 7. Storage Guidelines:

Keep in a dry, cool, and well-ventilated place. Avoid exposure to sunlight, humidity, and contamination. Seal tightly after use.

#### 8. Certification & Quality:

This product is manufactured in compliance with:

ISO 9001, ISO 22000

**GMP (Good Manufacturing Practices)** 

Halal, Kosher

**REACH & FDA compliance available upon request** 

Full documentation and third-party test reports can be provided for regulatory submissions or customer audits.

#### 9. Supplier's Note:

Jiangsu Khonor Chemicals Co., Limited provides high-quality, customizable Calcium Magnesium Citrate tailored for global markets.

With ultrafine powder grades optimized for liquid calcium-magnesium supplements, our product is particularly suited for teen nutrition and advanced formulations. Whether you need a specific Ca:Mg ratio, ultrafine mesh, or regulatory certification, we are ready to support your product development and market expansion.