

SPECIALTY PRODUCT

# CTS- Calcium Thio Sulphate

## Description :

**CTS- Calcium Thio Sulphate** is a versatile and effective nutrient source used primarily in agriculture and horticulture. Composed of calcium (Ca) and thiosulfate ( $S_2O_3$ ), CaTS fertilizer is valued for its unique properties and benefits to plants.

Calcium in CaTS plays a crucial role in cell wall formation and structural integrity, aiding in the overall strength and health of plants. It enhances root development, improves nutrient uptake efficiency, and helps in the regulation of various physiological processes such as enzyme activity and photosynthesis.

Thiosulfate sulfur in CaTS serves as a readily available source of sulfur, essential for protein synthesis and chlorophyll formation. Sulfur deficiency can lead to reduced crop quality and yield, making CaTS particularly beneficial in sulfur-deficient soils or during periods of high crop demand.

CaTS fertilizer is typically applied via fertigation or foliar spray, ensuring efficient and targeted delivery to plants. It is compatible with a wide range of other fertilizers and agrochemicals, allowing for flexible application in various crop management practices.

Overall, Calcium Thiosulfate (CaTS) fertilizer is prized for its dual-action benefits of providing both calcium and sulfur, contributing to improved plant growth, yield, and quality in agricultural settings.

## Benefits Of CTS- Calcium Thio Sulphate

### 1. Improves Soil Structure:

- Calcium helps in the formation and stabilization of soil aggregates, improving soil structure, porosity, and aeration. This leads to better root growth and water infiltration.

### 2. Enhances Nutrient Uptake:

- Calcium aids in the uptake of other nutrients by roots, particularly nitrogen, phosphorus, and potassium. This synergistic effect boosts overall plant nutrition.

### 3. Strengthens Plant Cell Walls:

- Calcium is a key component of cell walls and membranes. Its presence strengthens cell walls, leading to more robust plant structures and better resistance to diseases and pests.

### 4. Provides Essential Sulfur:

- Sulfur is vital for the synthesis of amino acids, proteins, and enzymes. It is also essential for chlorophyll formation and photosynthesis. CaTS supplies sulfur in a readily available form.

### 5. Reduces Soil Salinity:

- Calcium helps in displacing sodium ions from soil particles, thereby reducing soil salinity and mitigating the adverse effects of high sodium levels on plants.

### 6. Promotes Root Development:

- Calcium is crucial for root elongation and development. Enhanced root systems improve water and nutrient uptake, leading to healthier and more productive plants.

### 7. Increases Crop Yield and Quality:

- Adequate calcium and sulfur nutrition results in higher crop yields and improved quality. Fruits and vegetables tend to have better firmness, shelf life, and resistance to post-harvest diseases.

### 8. Compatible with Other Fertilizers:

- Calcium Thiosulfate is compatible with a wide range of fertilizers and can be used in combination with other nutrient solutions to provide a balanced nutrient supply.

## Recommended stage of usage of CTS- Calcium Thio Sulphate

Calcium Thiosulfate (CaTS) fertilizer is best applied via fertigation or foliar spray. For fertigation, apply during active growth stages to ensure calcium and sulfur availability for optimal plant uptake. Dilute CaTS in irrigation water and distribute it evenly across the field. As a foliar spray, apply during the early morning or late afternoon to maximize absorption through the leaves. Follow recommended dosage rates based on crop type, soil conditions, and nutrient requirements to achieve balanced nutrition and maximize crop yield and quality.

## Specifications :

Nutrient Content	Wt/Wt
Base	Liquid
Calcium Content (Ca)	15% by weight
Sulfur Content (S)	10% by weight
pH (10% Solution)	6.5 to 7.5
Solubility in Water	Completely soluble
Density	Approximately 1.33 g/cm <sup>3</sup> at 20°C

## Packing :

HDPE barrel

## Method Of Application :

Soil Application, Foliar Application

## Recommended Crops :

**Vegetables:** Tomatoes, peppers, cucumbers, and leafy greens like lettuce and spinach.

**Fruit Trees:** Apples, citrus fruits (oranges, lemons), grapes, and stone fruits (peaches, plums).

**Field Crops:** Corn, soybeans, wheat, and cotton.

**Specialty Crops:** Potatoes, onions, strawberries, and melons