



Calcium Propionate Food Grade MSDS

1. Product Identification

Item	Information
Product Name	Calcium Propionate Food Grade
Chemical Name	Calcium Propanoate
E Number	E282
CAS Number	4075-81-4
Chemical Formula	$C_6H_{10}CaO_4$
Molecular Weight	186.22 g/mol
Recommended Use	Food Preservative / Mold Inhibitor
Physical Form	White Powder / Granules

2. Hazard Identification

Calcium Propionate Food Grade is generally considered a low-hazard material when handled under normal industrial and food-processing conditions.

Potential effects may include:

- Dust may irritate the eyes.
- Prolonged dust exposure may irritate the respiratory system.
- Repeated contact may cause mild skin irritation in sensitive individuals.
- Ingestion in normal food-use concentrations is not expected to create significant hazards.

Avoid unnecessary dust generation during handling.

3. Composition / Information on Ingredients

Component	CAS Number	Concentration
Calcium Propionate	4075-81-4	≥ 99.0%

4. First Aid Measures

Eye Contact

Rinse immediately with clean water for several minutes. Remove contact lenses if easy to do. Seek medical attention if irritation continues.



Skin Contact

Wash affected skin with soap and water. Remove contaminated clothing if necessary.

Inhalation

Move the affected person to fresh air. Seek medical advice if coughing or respiratory irritation persists.

Ingestion

Rinse the mouth with water. Drink water if the person is conscious. Seek medical advice if large quantities have been swallowed or discomfort develops.

5. Fire-Fighting Measures

Calcium Propionate is not considered highly flammable.

Suitable extinguishing media include:

- Water spray
- Dry chemical powder
- Carbon dioxide
- Foam

Firefighters should use appropriate protective equipment when dealing with surrounding burning materials.

6. Accidental Release Measures

Avoid creating airborne dust.

For spilled material:

- Wear suitable protective equipment.
- Sweep or vacuum the material carefully.
- Transfer it into a suitable labeled container.
- Keep the product away from drains and unnecessary water exposure.
- Clean the area after collection.



7. Handling and Storage

Handling

- Avoid breathing dust.
- Avoid contact with eyes.
- Maintain good workplace hygiene.
- Use adequate ventilation.
- Keep packaging closed when not in use.

Storage

Store Calcium Propionate Food Grade:

- In a cool and dry warehouse
- Away from direct sunlight
- Away from moisture
- In tightly sealed packaging
- Away from incompatible materials
- On clean, dry pallets

8. Exposure Controls / Personal Protection

Recommended personal protection includes:

Protection Type	Recommendation
Eye Protection	Safety Glasses
Hand Protection	Protective Gloves
Respiratory Protection	Dust Mask Where Dust Forms
Skin Protection	Standard Work Clothing
Ventilation	Adequate General Ventilation

9. Physical and Chemical Properties

Property	Typical Value
Appearance	White Crystalline Powder / Granules
Odor	Slight / Nearly Odorless
Molecular Formula	C ₆ H ₁₀ CaO ₄
Molecular Weight	186.22 g/mol
pH	Approx. 7.5–10.5



Solubility in Water	Soluble
Physical State	Solid
Color	White
Flammability	Low / Not Readily Flammable

10. Stability and Reactivity

Calcium Propionate is stable under recommended storage and handling conditions.

Avoid:

- Excessive moisture
- Strong acids
- Strong oxidizing agents
- Excessive heat

No hazardous polymerization is expected under normal conditions.

11. Toxicological Information

Calcium Propionate generally presents low toxicity under normal intended use.

Possible exposure effects include:

- Eye irritation from dust
- Mild respiratory irritation
- Mild skin irritation in sensitive individuals

Always follow local occupational safety requirements.

12. Ecological Information

Avoid uncontrolled release into the environment.

The material is not generally considered highly hazardous to the environment in normal commercial quantities. However, large releases should be prevented.

13. Disposal Considerations

Dispose of waste material and contaminated packaging according to local, national, and regional regulations.



Do not discharge large quantities directly into waterways or drainage systems.

14. Transport Information

Calcium Propionate Food Grade is generally not classified as dangerous goods for standard transportation.

Transport Item	Classification
UN Number	Not Assigned
ADR/RID	Not Regulated as Dangerous Goods
IMDG	Not Regulated as Dangerous Goods
IATA	Not Regulated as Dangerous Goods

15. Regulatory Information

Calcium Propionate is widely used as food additive **E282**. Food manufacturers should verify compliance with applicable local food regulations before use.

16. Other Information

This MSDS provides general safety guidance for Calcium Propionate Food Grade. Exact handling and regulatory requirements may vary according to supplier specifications, destination market, and intended application.