

MATERIAL SAFETY DATA SHEET

Calcium Propionate Powder

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Item	Information
Product Name	Calcium Propionate Powder
CAS No.	4075-81-4
Synonyms	Bioban-C; Calcium Dipropionate; Calcium Propanoate
Chemical Name	Propionic Acid, calcium salt
Chemical Formula	Ca(CH ₃ CH ₂ COO) ₂ or C ₆ H ₁₀ CaO ₄
Molecular Weight	186.22 g/mol
Supplier	Tianjin Huge Roc Enterprises Co., Ltd
Address	1806, HUIJIN CENTRE, 65 DAGU BEILU, TIANJIN CHINA, 300041
Department Issuing MSDS	Product safety department

2. COMPOSITION / INFORMATION ON INGREDIENTS

Name	CAS No.	% by Weight
Calcium propionate	4075-81-4	99

Toxicological data on ingredients: Calcium propionate, oral LD50: acute 3920 mg/kg [Rat]; 2350 mg/kg [Mouse].

3. HAZARDS IDENTIFICATION

Potential acute health effects: hazardous in case of skin contact (irritant), eye contact (irritant), ingestion and inhalation.

Potential chronic health effects: carcinogenic effects, mutagenic effects, teratogenic effects and developmental toxicity are not available. Repeated or prolonged exposure is not known to aggravate medical condition.

4. FIRST AID MEASURES

Route	First Aid Procedure
Eye Contact	Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.
Skin Contact	Immediately flush skin with plenty of water. Cover irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse and thoroughly clean shoes before reuse. Get medical attention.
Serious Skin Contact	Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Serious Inhalation	Not available.
Ingestion	Do not induce vomiting unless directed by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as collar, tie, belt or waistband. Get medical attention if symptoms appear.
Serious Ingestion	Not available.

5. FIRE AND EXPLOSION DATA

Item	Information
Flammability of the Product	May be combustible at high temperature.
Auto-Ignition Temperature	Not available.
Flash Point	Not available.
Flammable Limits	Not available.
Products of Combustion	Some metallic oxides.
Fire Hazards	Slightly flammable to flammable in presence of heat.
Explosion Hazards	Risks of explosion of the product in presence of mechanical impact: not available. Slightly explosive in presence of open flames and sparks. Fine dust dispersed in air in sufficient concentrations and in the presence of an ignition source is a potential dust explosion hazard.
Fire Fighting Media and Instructions	Small fire: use dry chemical powder. Large fire: use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards	When heated to decomposition it emits acrid smoke and fumes. As with most organic solids, fire is possible at elevated temperatures.
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6. ACCIDENTAL RELEASE MEASURES

Spill Type	Procedure
Small Spill	Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
Large Spill	Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow evacuation through the sanitary system.

7. HANDLING AND STORAGE

Precautions: keep away from heat and sources of ignition. Empty containers pose a fire risk; evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents.

Storage: keep container tightly closed. Keep container in a cool, well-ventilated area.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control / PPE	Requirement
Engineering Controls	Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
Personal Protection	Splash goggles, lab coat, dust respirator, approved/certified respirator or equivalent, and gloves.
Large Spill Protection	Splash goggles, full suit, dust respirator, boots and gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist before handling this product.
Exposure Limits	Not available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Property	Result
Physical state and appearance	Solid; crystalline solid / powder
Odor	Not available
Taste	Not available
Molecular Weight	186.22 g/mol
Color	White
pH (1% solution/water)	Not available
Boiling Point	Not available
Melting Point	Not available
Critical Temperature	Not available
Specific Gravity	Not available
Vapor Pressure	Not applicable
Vapor Density	Not available
Volatility	Not available
Odor Threshold	Not available
Water/Oil Distribution Coefficient	Not available
Ionicity in Water	Not available
Dispersion Properties	See solubility in water
Solubility	Soluble in cold water and hot water

10. STABILITY AND REACTIVITY DATA

Item	Information
Stability	The product is stable.
Instability Temperature	Not available.
Conditions of Instability	Excess heat and incompatible materials.
Incompatibility with Various	Reactive with oxidizing agents.

Substances	
Corrosivity	Non-corrosive in presence of glass.
Special Remarks on Reactivity	Not available.
Special Remarks on Corrosivity	Not available.
Polymerization	Will not occur.

11. TOXICOLOGICAL INFORMATION

Endpoint	Information
Routes of Entry	Inhalation and ingestion.
Toxicity to Animals	Acute oral toxicity (LD50): 2350 mg/kg [Mouse].
Chronic Effects on Humans	Not available.
Other Toxic Effects on Humans	Hazardous in case of skin contact (irritant), ingestion and inhalation.
Special Remarks on Toxicity to Animals	Not available.
Special Remarks on Chronic Effects on Humans	Not available.
Special Remarks on Other Toxic Effects on Humans	Acute potential health effects: skin may cause skin irritation; eyes may cause eye irritation; inhalation may cause respiratory tract irritation; ingestion of large amounts may cause gastrointestinal tract irritation.

12. ECOLOGICAL INFORMATION

Item	Information
Ecotoxicity	Not available.
BOD5 and COD	Not available.
Products of Biodegradation	Possibly hazardous short-term degradation products are not likely. However, long-term degradation products may arise.
Toxicity of Biodegradation Products	The product itself and its products of degradation are not toxic.
Special Remarks on Biodegradation Products	Not available.

13. DISPOSAL CONSIDERATIONS

Waste disposal: waste must be disposed of in accordance with federal, state and local environmental control regulations.

14. TRANSPORT INFORMATION

Item	Information
DOT Classification	Not a DOT controlled material (United States).
Identification	Not applicable.
Special Provisions for Transport	Not applicable.

15. OTHER REGULATORY INFORMATION

Regulation / Classification	Information
Federal and State Regulations	TSCA 8(b) inventory: Calcium Propionate.
Other Regulations	EINECS: this product is on the European Inventory of Existing Commercial Chemical Substances.
WHMIS (Canada)	Not controlled under WHMIS (Canada).
DSCL (EEC)	R36: Irritating to eyes. S24/25: Avoid contact with skin and eyes. S36/37/39: Wear suitable protective clothing, gloves and eye/face protection. S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
HMIS (U.S.A.)	Health Hazard: 2; Fire Hazard: 1; Reactivity: 0; Personal Protection: E.
NFPA (U.S.A.)	Health: 2; Flammability: 1; Reactivity: 0; Specific hazard: not available.
Protective Equipment	Gloves, lab coat, dust respirator or approved/certified respirator equivalent, and splash goggles.

16. OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.