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SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Product	Calcium Propionate FCC V	**Revision date**	2026-11-16
Version	1.0	**Brand**	Richest

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product name	Calcium Propionate FCC V
Synonyms	CALCIUM PROPIONATE; 4075-81-4; Calcium propanoate; Propanoic acid, calcium salt; Bioban-C; Propionic acid, calcium salt
CAS No.	4075-81-4
EC No.	223-795-8
Molecular formula	(CH3CH2COO)2Ca / C6H10CaO4
Molecular weight	186.22 g/mol
Relevant identified uses	Food additive E282 / preservative; Food and feed preservation; no pharmaceutical claims beyond the FCC identity.
Uses advised against	No specific uses advised against were identified in the reviewed sources.
Company	Richest Group
Address	No. 999, Jiangyue Rd, Minhang, Shanghai 201114, China
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Website	www.richest-group.com
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SECTION 2: Hazards identification

GHS Classification	Serious eye damage Category 1
Pictogram(s)	GHS05
Signal word	Danger
Hazard statement(s)	H318 Causes serious eye damage
Precautionary statement(s)	P280; P305+P351+P338; P310
Other hazards	Generally treated as a non-toxic ingestion; Classified as generally recognized as safe (GRAS) when used in food; [HSDB] Oral LD50 (rat) = 3920 mg/kg; [Sax] May cause irritation; [MSDSonline] See Calcium.

SECTION 3: Composition/information on ingredients

Component	Calcium Propionate FCC V
CAS No.	4075-81-4
EC No.	223-795-8
Classification	Serious eye damage Category 1
Concentration	98.0-100.5% on dry basis

SECTION 4: First-aid measures	
If inhaled	Move the person to fresh air and keep comfortable for breathing. Get medical advice if symptoms occur.
In case of skin contact	Wash with plenty of water. Remove contaminated clothing. Get medical advice if irritation occurs.
In case of eye contact	Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Get medical advice if irritation persists.
If swallowed	Rinse mouth. Do not induce vomiting unless directed by medical personnel. Get medical advice if symptoms occur.
Most important symptoms and effects	No data available
Indication of immediate medical attention	Treat symptomatically. Show this safety data sheet to medical personnel.

SECTION 5: Fire-fighting measures	
Suitable extinguishing media	Water spray, dry chemical, carbon dioxide or appropriate foam
Unsuitable extinguishing media	No data available
Special hazards arising from the chemical	Avoid build-up of dust particles because of the possibility of dust explosion; irritating and toxic decomposition gases may be generated in a fire
Advice for firefighters	Wear self-contained breathing apparatus and protective clothing appropriate for the surrounding fire.

SECTION 6: Accidental release measures	
Personal precautions and emergency procedures	Avoid contact with the material. Ensure adequate ventilation. Wear appropriate personal protective equipment.
Environmental precautions	Prevent uncontrolled release to drains, soil and watercourses.
Methods for containment and cleaning up	Collect mechanically or with a suitable absorbent and place in a suitable closed container for disposal.

SECTION 7: Handling and storage	
Precautions for safe handling	Avoid contact with skin and eyes. Avoid formation or inhalation of dust, mist or vapour as applicable. Wash thoroughly after handling.
Conditions for safe storage, including incompatibilities	Keep dry and well closed; shelf life two years

SECTION 8: Exposure controls/personal protection	
Occupational exposure limit values	No data available
Biological limit values	No biological limit values were identified in the reviewed sources.
Appropriate engineering controls	Provide adequate ventilation. Eyewash facilities should be available where contact is possible.
Eye/face protection	Use safety eyewear appropriate to the risk of exposure.
Skin and body protection	Wear suitable protective gloves and clothing appropriate to the risk of exposure.
Respiratory protection	Use suitable respiratory protection if exposure limits may be exceeded or dust, mist or vapour is generated.

SECTION 8: Exposure controls/personal protection

Thermal hazards	No specific thermal hazards were identified in the reviewed sources; see Sections 5 and 10.

SECTION 9: Physical and chemical properties

Physical state	White crystals or white crystalline powder
Colour	COLORLESS, MONOCLINIC TABLETS
Odour	Odourless
Melting point / freezing point	No data available
Boiling point / boiling range	No data available
Flammability	Slightly flammable to flammable in the presence of heat; dust accumulation may present a dust-explosion hazard
Explosion / flammability limits	No data available
Flash point	Not applicable
Auto-ignition temperature	No data available
Decomposition temperature	>250 °C (Niacet ProBake Calcium Propionate product data)
pH	7.5-10.5 (10% aqueous solution)
Viscosity	Not applicable to the neat solid; solution viscosity depends on concentration, temperature and test method.
Solubility	Soluble in water.
Partition coefficient n-octanol/water	No data available
Vapour pressure	No data available
Density and/or relative density	No data available
Relative vapour density	No data available
Particle characteristics	White crystals or white crystalline powder
Bulk density	0.45-0.53 g/cm3

SECTION 10: Stability and reactivity

Reactivity	No data available
Chemical stability	Mubychem SDS: stable under normal conditions of use and storage; avoid strong oxidants. Thermal decomposition may produce carbon monoxide and fumes and may form calcium oxide; hazardous polymerisation will not occur.
Possibility of hazardous reactions	Hazardous polymerization will not occur
Conditions to avoid	Avoid heat, strong light, ignition sources, dust generation and contact with incompatible materials; store in a cool, dry place
Incompatible materials	Strong oxidizing agents
Hazardous decomposition products	When heated to decomposition it emits acrid smoke and irritating fumes.

SECTION 11: Toxicological information

Serious eye damage irritation	GHS classification: Serious eye damage Category 1

SECTION 11: Toxicological information

Acute toxicity	LD50 Rat oral 3920 mg/kg; LD50 Mouse oral 2350 mg/kg
Health effects	Generally treated as a non-toxic ingestion; Classified as generally recognized as safe (GRAS) when used in food; [HSDB] Oral LD50 (rat) = 3920 mg/kg; [Sax] May cause irritation; [MSDSonline] See Calcium.
Skin corrosion irritation	EFSA 2011 states that Calcium Propionate is not classified as an irritant; the manufacturer SDS also warns that dust/direct contact may cause skin irritation. These are respectively a regulatory assessment and supplier precautionary information, and precautions should be taken for dust exposure.
Sensitization	EFSA 2011's overall assessment of Propionic Acid and its salts is that they are unlikely to be skin sensitisers; no independent guinea pig test values for this substance were provided.
Carcinogenicity	The Mubychem SDS records the substance as not known to be carcinogenic; this statement is not a negative result from a long-term carcinogenicity study.
Toxicological summary	Acute oral toxicity is relatively low, and the principal handling concerns are dust and eye/skin contact. EFSA identified no environmental or consumer safety concerns for propionates at recommended feed uses, but this use-specific conclusion does not demonstrate safety for arbitrary industrial discharge.

SECTION 12: Ecological information

Ecotoxicity	PPDB reports: temperate freshwater fish (species not specified), 96 h LC50 >5,000 mg/L; Daphnia magna, 48 h EC50 >500 mg/L; and Desmodesmus subspicatus, acute growth-rate EC50 >500 mg/L (the PPDB entry does not state the algal exposure duration). The first two values are graded as verified values from EU/EFSA regulatory sources; the algal entry is sourced from a manufacturer SDS.
Persistence degradability	PPDB lists the general biodegradability of Calcium Propionate as readily biodegradable; the database entry does not also provide a specific OECD method or degradation percentage.
Bioaccumulative potential	PPDB reports a LogP of 0.33 at pH 7 and 20 °C (an EU/EFSA regulatory value verified for regulatory use), with a low interpretation indicating low bioaccumulation potential; the entry does not provide a measured BCF.
Mobility in soil	PPDB reports a water solubility of 490,000 mg/L at pH 7 and 20 °C (a verified value from US EPA and other sources), interpreted as high. Relatively high mobility in the aqueous phase is expected based on this high water solubility, but no measured Koc was identified, so no quantitative soil adsorption coefficient is provided.
Other adverse effects	EFSA 2011 considers that use of propionic acid and its sodium, calcium, and ammonium salts at recommended feed-additive levels is not of environmental concern; this conclusion has use and dose boundaries and does not support unrestricted direct bulk discharge.

SECTION 13: Disposal considerations

Product disposal methods	SRP: At the time of review, criteria for land treatment or burial (sanitary landfill) disposal practices are subject to significant revision. Prior to implementing land disposal of waste residue (including waste sludge), consult with environmental regulatory agencies for guidance on acceptable disposal practices.
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal in accordance with local regulations.

SECTION 14: Transport information

UN Number (ADR/RID, IMDG, IATA)	Not regulated as dangerous goods
UN Proper Shipping Name	Not regulated as dangerous goods
Transport hazard class(es)	Not regulated as dangerous goods
Packing group	Not regulated as dangerous goods
Environmental hazards / Marine pollutant	Not a marine pollutant in the reviewed supplier SDS.
Special precautions for user	Keep containers closed and secured during transport. Follow local transport requirements.

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product	No data available

SECTION 16: Other information

Full text of H-Statements	H318 Causes serious eye damage
Revision date	2026-11-16
Version	1.0
References	Supplier technical documents, public SDS/COA/TDS and regulatory sources reviewed. Public data citations are listed below. Public data sources: PubChem Calcium propionate (CID 19999): https://pubchem.ncbi.nlm.nih.gov/compound/19999 | Calcium Propionate — Pesticide Properties Database, Report 3497: https://sitem.herts.ac.uk/aeru/iupac/Reports/3497.htm | Scientific Opinion on the safety and efficacy of propionic acid, sodium propionate, calcium propionate and ammonium propionate for all animal species: https://www.efsa.europa.eu/mt/efsajournal/pub/2446 | Calcium Propionate — Material Safety Data Sheet: https://pcpenergy.com/muby/MSDS/calciumpropionateMSDS.htm | Calcium Propionate MSDS: https://www.foodchemadditives.com/msds/829 | Calcium Propionate, FCC Grade - Niacet ProBake product data: https://www.univarsolutions.com/cal-propionate-low-dns-fcc-500872 | Calcium propionate, product 18104: https://www.merckmillipore.com/NI/es/product/aldrich/18104 | Calcium propionate C0079 - Material Safety Data Sheet: https://analytyka.com/english/MSDS/C/C0079.htm
Abbreviations	CAS: Chemical Abstracts Service; ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road; IMDG: International Maritime Dangerous Goods; IATA: International Air Transport Association; SDS: Safety Data Sheet.
Disclaimer	The information in this SDS applies to the specified product and is provided in good faith based on information available to Richest Group at the date of issue. It describes health, safety and environmental requirements and does not constitute a guarantee of product properties. Users must assess suitability and comply with applicable regulations.