

Technical note

CaTAC™ Calcium Chloride Anhydrous (FCC)

CALTAC CALCIUM CHLORIDE—SO PURE YOU CAN SEE IT.

CaTAC Calcium Chloride is designed to meet increasingly stringent regulatory standards.

Purity

Meeting all Food Chemical Codex specifications for assay and impurity limits, CaTAC Calcium Chloride also keeps particulate matter well below maximum allowances specified by the General Provisions of the Food Chemical Codex:

General Provisions of FCC (Fourth Edition) "Soluble substances, when brought into solution, may show slight physical impurities, such as fragments of filter paper, fibers, and dust particles, unless excluded by definite tests or other requirements; however, it is a requirement that significant amounts of black specks, metallic chips, glass fragments, or other insoluble matter are not permitted."

Filter discs obtained in standard tests of CaTAC Calcium Chloride and competitive samples (CaCl₂-A and CaCl₂-B) demonstrate the significant superiority of CaTAC Calcium Chloride purity.

Solubility

Controlled particle size—both smaller and more uniform—lets CaTAC Calcium Chloride dissolve faster and more completely, even in concentrations far higher than normally used.

Handling

Uniform granules, with virtually no fines, eliminate dusting, caking, bridging and flowability problems. Waste and cleanup problems are also minimized.

CALTAC CALCIUM CHLORIDE—TECHNICAL DATA

The product of modern technology and a rigidly controlled process, CaTAC Calcium Chloride sets standards previously unattained in food-grade calcium chlorides.

Purity

CaTAC Calcium Chloride meets all Food Chemical Codex specifications, and is well within required limits of impurities.



Test Procedure: Dissolve 100 gm of sample in 1 liter of deionized water. Add 1–2 ml of 36% acetic acid until the solution clears. Filter immediately through a filter disc.

Particle Size and Uniformity

Particle size is controlled within a tighter range to produce both smaller and more uniform particles. As a result, CalTAC Calcium Chloride goes into solution faster and more completely, even in concentrations far higher than those of normal usage. Furthermore, CalTAC solutions—unlike other calcium chlorides—do not produce appreciable quantities of colored sediment.

Dusting/Flowability

Control of particle size to a narrow distribution virtually excludes fines, thereby reducing dusting problems in handling and mixing. Attendant problems of waste and clean up are significantly reduced. Flowability is improved, allowing virtually trouble-free machine feeding without caking.



Particle size of CalTAC (middle) versus ordinary CaCl₂, equally magnified.



Low-dusting, easy pouring of CalTAC Calcium Chloride.

CHEMICAL SPECIFICATIONS AND TYPICAL ANALYSIS

Tests	Food Chemical Codex Limits	CalTAC Calcium Chloride Typical Analysis
Appearance	—	Passes Test
Identification A	Passes Test	Passes Test
Identification B	—	Passes Test
Solubility	—	Passes Test
Assay (CaCl ₂)	93.0–100.5%	95.3%
pH (1 in 20)	—	10.3
Limits of Impurities:		
Lead (Pb)	5 mg/kg	<5 mg/kg
Arsenic (As)	3 mg/kg	<3 mg/kg
Magnesium and Alkali Salts	5.0% max.	2.2%
Fluoride (F)	0.004% max.	0.004%

CALTAC APPLICATIONS

Industry	Function
Soft Drink Industry	Water treatment to reduce alkalinity
Vegetable Canning Industry	Used as a firming agent
Brewing Industry	To adjust pH, precipitate calcium oxalate, assist in protein precipitation, and adjust flavor
Dairy Products	Cheese coagulation
Other	General purpose food additive

CALTAC CALCIUM CHLORIDE PACKAGING AND APPLICATION DATA

CalTAC Calcium Chloride (FCC) is available in standard packages of 50 lb bags, 110 lb (50 kg) drums and 2000 lb supersacks. **For assistance on specific applications or for information on ordering or other technical data, call toll free: 800-582-2537 or 1-908-859-2151.**

About Avantor™ Performance Materials — formerly Mallinckrodt Baker

Avantor™ Performance Materials, formerly Mallinckrodt Baker, manufactures and markets high-performance chemistries and materials around the world under two well-known and respected brand names, J.T.Baker® and Mallinckrodt Chemicals®. These products are widely used in biotechnology and pharmaceutical production; in the manufacturing of semiconductors, flat panel displays and photovoltaic cells; and in research, academic and quality control laboratories. Based in Phillipsburg, New Jersey (USA), Avantor™ is owned by an affiliate of New Mountain Capital, LLC. For additional information please visit www.avantormaterials.com or follow www.twitter.com/avantor_news

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