

BRINERS CHOICE™

Anhydrous Calcium Chloride Pellets

General Description

BRINERS CHOICE™ Anhydrous Calcium Chloride Pellets are manufactured according to the U.S. Food and Drug Administration's (FDA's) Good Manufacturing Practice (GMP) requirements. This product is intended for use in solution form. After dissolution in potable water and filtering or settling to remove insoluble residue, solutions made from BRINERS CHOICE pellets will meet or exceed the current edition of the Food Chemicals Codex (FCC) monograph for aqueous solutions of calcium chloride. BRINERS CHOICE calcium chloride is Kosher certified and complies with Halal requirements.

Properties¹ of BRINERS CHOICE™ Anhydrous Calcium Chloride Pellets

| | |
|--------------------|---------------|
| Physical State | Solid pellets |
| Color | White |
| Odor | Odorless |
| Hygroscopic | Yes |
| Assay, % by Weight | |
| Calcium chloride | 94.5% |
| Potassium chloride | 2.5% |
| Sodium chloride | 1.6% |
| Calcium bromide | 0.9% |
| Water | 0.5% |

FCC Requirements for Calcium Chloride Solutions

| | |
|----------------------------|-----------|
| Fluoride | < 0.004% |
| Lead | < 4 mg/kg |
| Magnesium and alkali salts | < 5.0% |
| Alkalinity | < 0.3% |

Applications

Solutions made from BRINERS CHOICE calcium chloride may be used in pre- and post-harvest treatments of fruits and vegetables to maintain firmness, reduce decay, and prevent certain diseases. Frozen food applications may use BRINERS CHOICE calcium chloride solutions as a secondary refrigerant or immersion freezing fluid. BRINERS CHOICE pellets may also be used as a deicer in and around freezers, lockers and storage areas.

BRINERS CHOICE calcium chloride is not recommended for food or beverage applications where a reaction of bromide impurity with oxidizing materials, such as ozone, may generate trace levels of impurities, such as bromate.

¹ These data are laboratory results typical of the product, and should not be confused with or as specifications.

Nutritional Summary²

Based on 100-g sample

| | | | |
|---------------|------|-----------|---------|
| Ash | 99 g | Chloride | 62 g |
| Water | 1 g | Calcium | 34 g |
| Carbohydrates | 0 g | Potassium | 1288 mg |
| Fat | 0 g | Sodium | 650 mg |
| Protein | 0 g | | |

Sales Specification and Certificate of Analysis

The sales specification for BRINERS CHOICE™ Anhydrous Calcium Chloride Pellets contains all of the specification items listed in FCC for calcium chloride solution, plus two requirements governing pellet size and one governing water-insoluble residue. Two monograph specification items with a long history of levels at or below detection limits (fluoride and lead) are audited once per production campaign. Every lot is analyzed for the remaining specification items. A Certificate of Analysis (CoA) is provided with every product shipment, containing the test results for all specification items.

Product Quality Management

BRINERS CHOICE pellets are manufactured in Ludington, Michigan, using rigorous quality-control procedures to ensure outstanding product quality and application reliability. Current Good Manufacturing Practice (cGMP) principles, as published by the International Pharmaceutical Excipients Council (IPEC), are applied during all manufacturing and handling steps for BRINERS CHOICE calcium chloride.

Regulatory Information

This product, when used unmodified, will comply with the U.S. FDA Food Additive Regulations 21 CFR 184.1193 and 21 CFR 582.1193. These regulations affirm that the product is Generally Recognized As

²All "non-zero" values are based on internal laboratory analysis. All "zero" values are estimates based on process knowledge and chemical structure.

Safe (GRAS) for use in human foods. The uses above are subject to the GMP requirements and any limitations that are part of the regulations. The regulations should be consulted for complete details.

Availability

BRINERS CHOICE pellets are available in 50-lb plastic bags.

Storage and Handling

BRINERS CHOICE™ Anhydrous Calcium Chloride Pellets have a shelf life of two years when stored in a manner that protects the product from absorption of significant amounts of atmospheric moisture.

For most handling situations, no precautions other than clean, body-covering clothing should be needed. Use of specific items such as goggles, gloves and aprons will depend on the specific application. Eye and face protection is recommended when handling solutions in a manner where splashing or spraying is possible. Avoid contact with leather.