



Citric Acid Anhydrous, Granular USP-NF/FCC (Excipient/Food Use Only) (Product Code: 020410)

TECHNICAL DATA & INFORMATION

Product Information

Citric acid anhydrous is widely used in the food, beverage, and pharmaceutical industries to impart a clean, refreshing tartness. Its prime use is as an acidulant, but it is also used as a sequestrant of metal ions to give protection from the development of off-flavors and off-odors in certain foodstuffs. A major industrial use of citric acid is in the manufacture of ecologically compatible detergents. It is also used in chemical cleaning, concrete admixtures, plasticizers, and a range of other applications.

General Characteristics

| | |
|-------------------------------|---|
| Formula | C ₆ H ₈ O ₇ (M.W.= 192.13) |
| Appearance | White, fine, translucent crystals |
| Odor | None |
| Taste | Tart |
| Solubility (g/100 ml at 25°C) | 162 in Water 59.1 in Alcohol |

Standard Specifications

| | |
|---------------------------------|----------------------------------|
| Identification | Meets USP-NF/FCC |
| Clarity of Solution | Meets USP-NF |
| Color of Solution | Meets USP-NF |
| Assay (anhydrous basis) | 99.5 to 100.5% |
| Water | Maximum 0.5% |
| Residue on ignition | Maximum 0.05% |
| Limit of Oxalic Acid | Maximum 0.036% |
| Sulfate | Maximum 0.015% |
| Heavy Metals (as lead) | Maximum 5.0 ppm |
| Lead | Maximum 0.5 ppm |
| Readily Carbonizable Substances | Not darker than matching fluid K |
| Oxalate | Passes test |

Storage and Shelf Life

Citric Acid Anhydrous should be stored below 75°F and 55% relative humidity inside a tightly sealed container. The shelf life or “best by” date is 3 years. Retesting of the product is recommended after 3 years.

Availability

ADM Citric Acid Anhydrous Granular is available in 50 lb. bags, 25 kg bags, 250 lb. drums, 1000 kg and 2000 lb. tote quantities.

Regulatory Status

This Food Additive complies with all the compendial requirements of the U.S. Pharmacopeia, Food Chemical Codex, Code of Federal Regulations, European Pharmacopoeia, British Pharmacopoeia, Japanese Pharmacopoeia, and W.H.O. / F.A.O. Food Additive Specification.

Labeling

Citric Acid Anhydrous

Identification

CAS Number: 77-92-9
EINECS: 201-069-1

Regulatory Data

Country of Origin: United States
GRAS Affirmation 21 CFR 184.1033

Granulation (ADM)

On 16 USS Mesh 2% maximum
Through 50 USS Mesh 10% maximum

Lot Numbering Info

SYMMDDB (Ex: S508261= 8-26-2015)
S=Manufacturing location (Southport, NC)
Y= last digit of year
MM= month
DD= day of month
B= packaging bin number

Date Approved
2017-09-05

Version
3.0

Document #
CBU.TS.SPEC.020410

The information contained herein is correct as of the date of this document to the best of our knowledge. Any recommendations or suggestions are made without guarantee or representation as to results and are subject to change without notice. We suggest you evaluate any recommendations and suggestions independently. WE DISCLAIM ANY AND ALL WARRANTIES, WHETHER EXPRESS OR IMPLIED, AND SPECIFICALLY DISCLAIM THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT. Our responsibility for claims arising from any claim for breach of warranty, negligence, or otherwise shall not include consequential, special, or incidental damages, and is limited to the purchase price of material purchased from us. None of the statements made here shall be construed as a grant, either express or implied, of any license under any patent held by Archer Daniels Midland Company ingredients.



Citric Acid Anhydrous, Granular USP-NF/FCC (Excipient/Food Use Only) (Product Code: 020410)

Allergen Information

The following major food allergens recognized under the US Food Allergen Labeling and Consumer Protection Act of 2004 (FALCPA) are not present in this product. This product is not manufactured with equipment that comes in contact with the listed allergens, nor do we have these allergens within the processing areas. Sulfur dioxide, which is considered a sensitizer, can be used in the manufacture of this product, but residual levels will not exceed 10 ppm.

- cereals containing gluten
- peanuts and peanut products
- soybean and soy products
- tree nuts
- milk and dairy products
- wheat and wheat products
- crustaceans, mollusks and their products
- egg and egg products
- fish and fish products
- other allergens such as buckwheat, celery, cottonseed, mustard, mustard seed, rice, lupin, sesame seed and sunflower seeds

Nutrition Information (per 100g product)

| Nutrient: | |
|-----------------------------|----------|
| Total Calories | 247 Kcal |
| Calories from Saturated Fat | 0 Kcal |
| Total Fat | 0 g |
| Saturated Fat | 0 g |
| Trans Fat | 0 g |
| Polyunsaturated Fat | 0 g |
| Monounsaturated Fat | 0 g |
| Cholesterol | 0 mg |
| Total Carbohydrates | 99.45 g |
| Total Sugars | 0 g |
| Sugar Alcohols | 0 g |
| Other Carbohydrates | 0 g |
| Dietary Fiber | 0 g |
| Soluble Fiber | 0 g |
| Insoluble Fiber | 0 g |
| Protein | 0 g |
| Calcium | 0.2 mg |
| Iron | <0.01 mg |
| Sodium | 0.3 mg |
| Potassium | 0.3 mg |
| Moisture | 0.5 g |

Other Essential Vitamins and Minerals:

| | |
|-------------------------|-----------------------|
| Thiamine | 0 mg |
| Riboflavin | 0 mg |
| Niacin | 0 mg |
| Vitamin D | 0 mg |
| Vitamin E | 0 mg alpha-tocopherol |
| Vitamin B ₆ | 0 mg |
| Folic Acid | 0 µg DFE |
| Vitamin B ₁₂ | 0 µg |
| Vitamin A | 0 µg RAE |
| Vitamin C | 0 mg |

There have been no sugars added during the production process. The total sugars value represents the sugars in this finished ingredient. ADM is not listing added sugars on technical documents to lessen confusion for formulators when calculating their Nutrition Facts panel information.

Date Approved
2017-09-05

Version
3.0

Document #
CBU.TS.SPEC.020410

The information contained herein is correct as of the date of this document to the best of our knowledge. Any recommendations or suggestions are made without guarantee or representation as to results and are subject to change without notice. We suggest you evaluate any recommendations and suggestions independently. WE DISCLAIM ANY AND ALL WARRANTIES, WHETHER EXPRESS OR IMPLIED, AND SPECIFICALLY DISCLAIM THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT. Our responsibility for claims arising from any claim for breach of warranty, negligence, or otherwise shall not include consequential, special, or incidental damages, and is limited to the purchase price of material purchased from us. None of the statements made here shall be construed as a grant, either express or implied, of any license under any patent held by Archer Daniels Midland Company ingredients.