

Technical Data Sheet

Version 2.0 Revision Date 01/01/2017

Product Name:Betaine Citrate

Chemical name: Betaine dihydrogencitrate

CAS numeber: 17671-50-0

Molecular formula: C₁₁H₁₉NO₉

Molecular Weight: 309.27

Chemical Structure:

Function: Source of betaine

Physical/Chemical characteristics

Appearance: White to off-white crystals Odor: odorless or faint characteristic odor

Melting point: $134-140^{\circ}$ C

Bulk density: 0.55-0.75g/mL

Product specification*

Assay: $\min 99\%$ d.s. pH(10% solution): 2.0-3.0 Loss on dry: $\max 0.5\%$ Residue on ignition: $\max 0.1\%$

*Only selected data is represented here, for a full set of specifications we refer to our Specifications sheet.

Applications

Betaine is an important human nutrient, distributed widely in animals, plants, and microorganisms. It is rapidly absorbed and

utilized as an osmolyte and source of methyl groups and thereby helps to maintain liver, heart, and kidney health. The growing body of evidence shows that betaine is an important nutrient for the prevention of chronic disease. Betaine citrate is a citrate salt and is a new product of chemical technology. It is used specifically to provide Betaine to improve liver function and as a Hepatoprotectant. Some studies show that Betaine citrate may be effective for the treatment of cardiovascular diseases. It is also used as a food redispersing agent, preservatives and antioxidants. Betaine citrate, can be fully assimilated by the body and has no or little side effects, although further research is needed to prove its safety.

Potential benefits

- May prevent or reduce accumulation of fat in the liver, a common result of obesity,high fat diet, diabetes and alcohol consumption, and may have the potential to aid in the treatment of Alcoholic Liver Disease
- May enhance athletic performance by improving a sense of well-being, lessening fatigue, providing greater strength and endurance, and increasing a desire for (and performance of) physical and mental work

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Doc No: TDS-024-1E Page 1/2

Usage

Betaine Citrate contains 34.6% of betaine. As a food supplement is usually taken in doses of 500-1,500 mg daily with food.

The rapeutic dosages recommended by doctors are usually around 1.5 - 6.0 grams daily in two or three divided doses.

For specific conditions usually the following doses are advised under the supervision of a doctor:

For the treatment of alcohol-induced fatty liver, the recommended amount for Betaine citrate is 1 to 2 grams three times daily.

For cardiovascular disease, take 1500 - 3000 mg Betaine per day.

For treatment of homocystinuria, the dose should be 6 grams Betaine per day.

Safety

The product conforms to the current editions of Food Chemical Codex.

It is lactose free and gluten free, Non-GMO, Non-ETO; BSE/TSE free.

Shelf life

Two year from date of manufacture when stored in original packaging.

Storage conditions

Store in the original sealed container in a cool and dry placeout of direct sunlight. Store below $40^{\circ}\text{C}(104^{\circ}\text{F})$.

Packaging

25 kg fiber drums with two polythylene inner bag or as per your request.

Further information

The tolerances are given in the product specification sheet. Further safety information is provided in our Material Safety Data Sheet.







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Doc No: TDS-024-1E Page 2/2