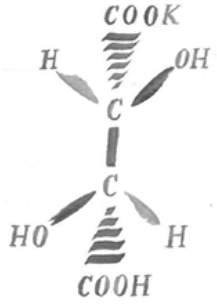
Technical Data Sheet

Cream of tartar E336i

chemical name
Anhydrous monopotassium salt
of L(+)-tartaric acid
Anhydrous monopotassium salt
of L-2,3-dihydroxybutanedioic
Potassium hydrogen
(2R,3R)-2,3-dihydroxybutane-1,4-dioate



chemical formula $C_4H_5KO_6$

molecular mass 188.18 g/mol

CAS number 868-14-4

EINECS number 212-769-1

state alterations none

solubility (water 20°C) 6.17 g/L

solubility (water 100°C) 62.5 g/L

solubility (alcol 95°C) insolubile

pH (acqueous solution 1%) 3.4

melting point 230°C

Definition

Cream of tartar (synonyms: monopotassium tartrate – monobasic potassium tartrate, potassium hydrogen tartrate – potassium bitartrate, potassium acid tartrate) contains not less than 99.5 per cent and not more than the equivalent of 100.5 per cent of the anhydrous substance.

Cream of tartar presents itself as white or almost white crystalline powder or colourless crystals.

Cream of tartar is naturally present in grapes. It deposits when the wine is left to stay in tanks, especially during winter months.
Cream of tartar is purified without adding any toxic or noxious chemical additives. The result is the white powder, which has always been used to make cakes.
Some very famous industries today prefer to use natural products, such as cream of tartar, thus treasuring ancient traditions.
Cream of tartar was well known in ancient days, ever since wine was made from grapes, since it could be gathered on the sides and at the bottom of wine vases. Alchemists used it as a flux for certain metals; Paracelsus claimed it had great therapeutic virtues, a panacea for every illness. Van Helmont explained how the cream was separated from the wine. Boerhave also identified it in grape must, and other chemists such as Libavius, Corvnus and Sola discovered the presence of potassium in it. In the VIIIth century, it was given the name of *tartar*, an Arabic word meaning wine deposit.
Tartaric products in general today are in great demand, due to their excellent ease of digestion, in the business of improvements for bread making.

HACCP

Our Company applies the HACCP self-control system to guarantee our products (food additives) comply with the law and with contract specifications and prevent hygienic and health hazards, safeguarding public health.

Natural cream of tartar	Reg. (UE) 231/2012	PH.EUR./BP	USP	Food Chemicals Codex	Codex Oenologique International	Inside Specifications
Optical rotation test (identification)		compliant (test A)				
Test B (identification)		compliant (test B)				
Test for tartrate (identification)	positiv	compliant (test C)	compliant (test C)			
Test for potassium (identification)	positiv	compliant (test D)				
Further tests – flame (identification)			compliant (test A)	compliant (test A)		
Further tests – sodium cobalt nitrite (identification)			compliant (test B)	compliant (test B)		
Further tests (identification)				complaint (test C)		
Assay	> 98.0%	99.5-100.5%	99.0-101.0%	99.0-101.0%		**99.5-100.5%**
Specific optical rotation		+ 8.0 - + 9.2°				**+ 8.0 - + 9.2°**
Loss on drying	< 1.0%	< 0.5%			< 1%	**< 0.5%**
Sulfates		< 500 ppm				**< 500 ppm**
Chlorides		< 500 ppm				**< 500 ppm**
Ammonium			0.01%	compliant (test Ammonia)		**0.01%**
Oxalates (oxalic acid)	< 100 mg/kg	< 500 ppm			< 100 mg/kg	**< 100 mg/kg**
Sodium					< 1%	**< 1%**
Iron					< 10 mg/kg	**< 10 mg/kg**
Arsenic	< 3 mg/kg				< 3 mg/kg	**< 3 mg/kg**
Barium		compliant (test Barium)				**compliant (test Barium)**
Mercury	< 1 mg/kg				< 1 mg/kg	**< 1 mg/kg**
Lead	< 2 mg/kg			< 2 mg/kg	< 5 mg/kg	**< 2 mg/kg**
Heavy metals			< 20 ppm			**< 20 ppm**

Sieve analysis

Max 1% > 200 µm
Max 15% 100/200 µm
Approx 40% 40/100 µm

Nutritional values for 100 g of product

Energy value	1034 kJ, 238 kcal
Sodium	< 1%
Potassium	20.5%
Calcium	absent
Iron	< 10 ppm
Water	-
Ash	-
Fats	absents
Cholesterol	absent
Proteins	absents
Carboxylic acids	79.5%
Vitamins	absents

In accordance with European Regulation 1129/2011, the additive is authorized to be used *quantum satis* in all the categories; 5000 mg/kg in processed cereal-based foods and baby foods for infants and young children.

Declarations

In the formulation of cream of tartar, there are no *Allergens* listed in Annex II to European Regulation 1169/2011, neither by adding nor due to cross-contamination.

In accordance with the European Regulation 1881/2006, there are no *Aflatoxins*, *Dioxins*, *Polycyclic Aromatic Hydrocarbons*. There are not even any *Pesticides*, in accordance with the European Regulation 396/2005.

Cream of tartar and raw materials used for its production do not contain and do not come from *Genetically Modified Organisms*.

Cream of tartar does not contain, is not produced and does not come into contact with *substances of animal origin*.

The product is suitable for consumption by *vegans* and *vegetarians*.

Cream of tartar has *Kosher* and *Halal* certifications.

Packaging

The finished product is packed in 25 kg paper bags with polyethylene inside or in 25 kg drums containing bagged product, marked as per law requirements and palletized.

Shelf life

The period of minimum durability of cream of tartar is 5 years, in its original packaging sealed by the producer.
As the product is hygroscopic, powders cake at different times.

Recommended storage conditions

Store in a cool, dry, ventilated area. Protect against physical damage. Isolate from any source of heat or ignition. Superimposing unallowed.