Beverage Stabilization Pure Tartrate

Pure Tartrate stabilizer is a pure, powdery potassium hydrogen tartrate. It is used for the crystal (tartrate) stabilization of wine and sparkling wine via the contact technique.

The specific advantages of Pure Tartrate stabilizer:

- Fine grinding of the Pure Tartrate stabilizer provides large active surface area
- Large surface area ensures high efficacy
- High purity of the product

Application

In order to achieve the desired effect, 33.38 lb/1,000 gal (400 g/hl or 4 g/l) of Pure Tartrate stabilizer should be added.

Application recommendation

In order to achieve high efficiency of the tartrate stabilization, the procedure should be carried out immediately prior to bottling.

Prior to the addition of Pure Tartrate stabilizer, the wine or base wine for sparkling wine should be clear, i.e. it will have to be fined and filtered. Substances that are susceptible to colder temperatures, such as colloids, protein compounds, tannins etc. can significantly inhibit the precipitation of tartrate.

In order to achieve a good effect, the wine or sparkling wine should therefore be cooled to approx. 32 - 41 °F (0 - 5 °C). The colder the temperature, the faster and better the stabilization effect.

Add Pure Tartrate stabilizer after the wine has been cooled. In order to achieve optimum distribution and effect of the contact tartrate, stir the wine frequently after the tartrate has been added. At low temperatures $(32 - 41 \, {}^{\circ}\text{F} \, (0 - 5 \, {}^{\circ}\text{C}))$, a reaction time of a few hours is sufficient.

The higher the temperature, the longer complete tartrate precipitation will take. The contact time at temperatures above 41 °F (5 °C) should therefore be several hours (overnight), or preferably 1 - 2 days.

After the required contact time has elapsed, the tartrate sediment has to be removed at low temperature. Separation options include decanting, diatomaceous earth filtration or centrifugation (separator). In order to remove even very small crystals and therefore prevent re-solution, Eaton recommends filtration with depth filter sheets.

The used and separated pure tartrate may be reused several times, depending on the degree of contamination. Note that with every application the tartrate crystals will grow, thus reducing the effectiveness of the process; the contact time should therefore be increased.

Product Characteristics

Pure Tartrate stabilizer is a natural product produced from pure, finely ground potassium hydrogen tartrate crystals. The fineness of the crystals and the contact temperature are very significant parameters for the contact procedure.

The solubility of the tartrate in wine or sparkling wine depends on a variety of factors, so that the ratio between potassium content and tartaric acid does not provide reliable information about the stability of the beverage.

Tartrate precipitation depends on the following factors:

Storage temperature, alcohol content, pH value, polymer substances (e.g. proteins and colloids), haze substances, polyphenols, polysaccharides.

During storage, these factors may change, causing tartrate to precipitate. The contact technique was developed to provide better control of this process. Ground potassium hydrogen tartrate (tartrate) is added to the cooled wine, in order to achieve oversaturation with tartrate and at the same time obtain a sufficient number of germination crystals (inoculation crystals) for tartrate precipitation to occur.

The potassium hydrogen tartrate contained in the wine or sparkling wine will be adsorbed by the inoculation crystals (the previously added potassium hydrogen tartrate) and will precipitate together with those crystals. The finer the added tartrate, the faster and more effective tartrate precipitation is.



Safety

When used and handled correctly, there are no known unfavorable effects associated with this product.

Further safety information can be found in the relevant Material Safety Data Sheet, which can be downloaded from our website.

Storage

Pure Tartrate stabilizer has to be stored in dry conditions in order to avoid clotting. The containers should be well sealed and stored in a cool, odorneutral place. In unopened containers, Pure tartrate stabilizer has a shelf life of at least two years.

Delivery Information

Pure Tartrate stabilizer is sold under article number HW.005 and is supplied in the following packaging size:

55.1 lb (25 kg) PE bag

Certified Quality

During the production process, Pure Tartrate stabilizer is constantly monitored to ensure consistently high quality. These inspections cover technical function criteria as well as conformance with the relevant laws governing the production and sale of foodstuffs. Strict controls are carried out immediately before and during final packaging.

