## INTERNATIONAL OENOLOGICAL CODEX

## Potassium hydrogen tartrate

# **COEI-1-POTBIT Potassium hydrogen tartrate**

# Potassium L-2,3-dihydroxy hydrogen butanedioate

# **Monopotassic tartrate**

## **Potassium bitartrate**

## COOH-CHOH-CHOH-COOK = 188.17

## SIN No. 336 i

### 1. Objective, origin and scope of application

This addition of potassium hydrogen tartrate, commonly called potassium bitartrate, promotes the crystallization of tartaric acid salts when cold-treating wines.

### 2. Labelling

The label should indicate the product's purity, size grading, and safety and storage conditions.

#### 3. Properties

This is an anhydrous monopotassic salt of L(+) tartaric acid  $C_4H_5O_6K$ .

It is found in the form of white crystals or white granulated powder having a slightly acidic taste.

### 4. Solubility

Water at 20 °C 5.2 g/l

Water at 100 °C 61 g/l

Insoluble in alcohol

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#### 5. Tests

### 5.1. Desiccation Loss (Volatile Substances)

After 4 hours of drying in an oven at 105 °C, weight loss should be no more than 1 pp 100.

### 5.2. Preparing the Solution for Tests

Place 10 g potassium hydrogen tartrate, 50 ml water and 1 ml concentrated hydrochloric acid in a 100 ml volumetric flask. Stir and fill to the top with water.

Perform the same tests on this solution as those indicated in the monograph on L(+) tartaric acid (with the exception of chlorides), and observe the same limits.

#### 5.3. Sodium

Using the flame photometry technique described in the Compendium, analyze sodium conent in the test solution (5.2). (Sodium content should be less than 1 pp 100,).

#### 5.4. Iron

Add 1 ml concentrated hydrochloric acid (R) and 2 ml potassium thiocyanate solution having a concentration of 5 pp 100 (R) to 10 ml test solution (5.2). The red color produced should not be more intense than that of a control prepared using 1 ml of an iron (III) salt solution in a concentration of 0.010 g iron per liter (R), 9 ml water, and the same quantities of the same reagents (content should be less than 10 mg/kg).

Iron can also be analyzed quantitatively by atomic absorption spectometry, in accordance with the technique described in the Compendium.

#### 5.5. Lead

Using the technique described in the Compendium, determine lead content in the test solution (5.2). (Lead content should be less than 5 mg/kg.)

#### 5.6. Mercury

Using the technique described in the annex determine the mercury content in the test solution (5.2). (Mercury content should be less than 1 mg/kg.)

#### 5.7. Arsenic

Using the technique described in the annex, determine the arsenic content in the test solution (5.2). (Arsenic content should be less than 3 mg/kg.)

#### 5.8. Oxalate

Using the technique described in the annex, determine oxalate content in the test solution (5.2). (Oxalate content, expressed in the form of axalic acid, should be less

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than 100 mg/kg.)

## 6. Storage

Potassium hydrogen tartrate should be stored in hermetically sealed containers.

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