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	

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

than 100 mg/kg.)

6. Storage

Potassium hydrogen tartrate should be stored in hermetically sealed containers.