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Change to read:

Strontium Acetate,

$Sr(CH_3COO)_2 \cdot ½H_2O$ 214.72 CAS RN®: 543-94-2.—White, crystalline powder. Soluble in 3 parts of water; slightly soluble in alcohol.

Assay: Ignite about 3 g, accurately weighed, in a platinum crucible, protecting from sulfur in the flame. Cool, transfer the crucible with the residue to a beaker, and add 50 mL of water and 40.0 mL of 1 N hydrochloric acid VS. Boil gently for 30 minutes or longer, if necessary; filter; wash with hot water until the washings are neutral; add methyl red TS; and titrate the excess acid with 1 N sodium hydroxide VS. Each mL of 1 N hydrochloric acid is equivalent to 107.4 mg of $Sr(CH_3COO)_2 \cdot ½H_2O$: not less than 99% is found.

Insoluble Matter ⟨Reagent test⟩**:** not more than 2 mg, from 10 g (0.02%).

Free Alkali or Free Acid: Dissolve 3 g in 30 mL of water, and add 3 drops of phenolphthalein TS: no pink color is produced. Titrate with 0.1 N sodium hydroxide VS to a pink color: not more than 0.30 mL of the 0.1 N sodium hydroxide is required.

Barium: Dissolve 1 g in 10 mL of water, and add 1 drop of glacial acetic acid and 5 drops of potassium dichromate solution (1 in 10): no turbidity is produced within 2 minutes (about 0.02%).

Calcium: Ignite 1 g until completely carbonized. Warm the residue with a mixture of 3 mL of nitric acid and 10 mL of water, filter, wash with 5 mL of water, and evaporate the filtrate on a steam bath to dryness. Powder the residue, and dry it at 120° for 3 hours. Reflux the dried powder with 15 mL of dehydrated alcohol for 10 minutes, cool in ice, and filter. Repeat the extraction with 10 mL of dehydrated alcohol. Evaporate the combined filtrates to dryness, add 0.5 mL of sulfuric acid, and ignite: the weight of the residue is not more than 10 mg (0.3% of Ca).

Chloride ⟨Reagent test⟩**:** One g shows not more than 0.1 mg of Cl (0.01%).

Heavy Metals ⟨Reagent test⟩**:** 0.001%.

▲Iron ⟨241⟩, *Procedures, Procedure 1*▲ (CN 1-Jun-2023)**:** Dissolve 1.0 g in 45 mL of water, and add 2 mL of hydrochloric acid: the solution shows not more than 0.01 mg of Fe (0.001%).

Alkali Salts: Dissolve 2 g in 80 mL of water, heat to boiling, add an excess of ammonium carbonate TS, boil for 5 minutes, dilute with water to 100 mL, and filter. Evaporate 50 mL of the filtrate, and ignite: the residue, after correcting for the ignition residue from half the volume of the clear ammonium carbonate TS used above, is not more than 3 mg (0.3%).

Nitrate: Dissolve 1 g in 10 mL of water, add 0.10 mL of indigo carmine TS, and then add 10 mL of sulfuric acid: the blue color persists for 5 minutes (about 0.01% of NO_3).

Auxiliary Information - Please check for your question in the FAQs before contacting USP.

Topic/Question	Contact	Expert Committee
STRONTIUM ACETATE	Margareth R.C. Marques Principal Scientific Liaison	HDQ Headquarters

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