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## Ferric Ammonium Citrate

—Thin, transparent, garnet-red scales or granules or brownish-yellow powder. Is deliquescent and is affected by light. Very soluble in water; insoluble in alcohol.

**Assay:** Accurately weigh about 1 g, dissolve in 25 mL of water in a glass-stoppered flask, add 5 mL of hydrochloric acid and 4 g of potassium iodide, insert the stopper in the flask, and allow to stand in the dark for 15 minutes. Add 100 mL of water, and titrate the liberated iodine with 0.1 N sodium thiosulfate VS, adding 3 mL of starch TS as the endpoint is approached. Perform a blank determination, and make any necessary correction. Each mL of 0.1 N sodium thiosulfate is equivalent to 5.585 mg of Fe: between 16.5% and 18.5% is found.

**Ferric Citrate:** To 250 mg dissolved in 25 mL of water add 1 mL of potassium ferrocyanide TS: no blue precipitate is formed.

**Tartrate:** Dissolve 1 g in 10 mL of water, add 1 mL of potassium hydroxide TS, boil to coagulate the ferric hydroxide, adding more potassium hydroxide TS, if necessary, to precipitate all of the iron, filter, and slightly acidify the filtrate with glacial acetic acid. Add 2 mL of glacial acetic acid, and allow to stand for 24 hours: no crystalline white precipitate is formed.

▲ **LEAD (251), Procedures, Procedure 1** ▲ (CN 1-Jun-2023): Dissolve 1.0 g in 30 mL of water, add 5 mL of dilute nitric acid (1 in 21), boil gently for 5 minutes, cool, and dilute with water to 50 mL: 20 mL of the solution shows not more than 0.008 mg of Pb (0.002%).

**Auxiliary Information** - Please [check for your question in the FAQs](#) before contacting USP.

Topic/Question	Contact	Expert Committee
FERRIC AMMONIUM CITRATE	<a href="#">Margareth R.C. Marques</a> Principal Scientific Liaison	HDQ Headquarters

**Most Recently Appeared In:**

Pharmacopeial Forum: Volume No. Information currently unavailable

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