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Change to read:

0.07 N Ferrous Ammonium Sulfate VS

▲▲ (USP 1-May-2021)

In a 1000-mL volumetric flask, dissolve 27.5 g of ferrous ammonium sulfate in 500 mL of water. Add 20 mL of sulfuric acid. Cool and dilute with water to volume.

▲Standardization

See *Volumetric Solutions, 1. Introduction*.

See *Titrimetry ⟨541⟩*.

Standardize by one of the following procedures. [Note—Other standardization procedures may be used. See *Volumetric Solutions, 2. Preparation and Standardization, 2.3 Standardization*.]

Standardization with visual endpoint: ▲ (USP 1-May-2021) Standardize this solution on the day of use.

Dilute 25 mL of 0.025 N potassium dichromate VS with water to 100 mL. Add 30 mL of sulfuric acid and cool to room temperature. Add 3 drops of ferroin TS and titrate with the ferrous ammonium sulfate solution. The color change is sharp, going from blue-green to reddish brown.

$$N = \frac{mL\ K_2Cr_2O_7 \times N\ K_2Cr_2O_7}{mL\ Fe((NH_4)_2SO_4)_2}$$

▲Standardization with potentiometric endpoint: Standardize this solution on the day of use.

Dilute 25 mL of 0.025 N potassium dichromate VS with water to 100 mL. Add 30 mL of sulfuric acid and cool to room temperature. Titrate potentiometrically with the ferrous ammonium sulfate solution using a combined platinum (Pt) electrode.

$$N = \frac{mL\ K_2Cr_2O_7 \times N\ K_2Cr_2O_7}{mL\ Fe((NH_4)_2SO_4)_2}$$

[Note—If this volumetric solution is used in a qualitative application such as pH adjustment, dissoluton medium, or diluent, its standardization is not required.]▲ (USP 1-May-2021)

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

Topic/Question	Contact	Expert Committee
0.07 N FERROUS AMMONIUM SULFATE VS	Margareth R.C. Marques Principal Scientific Liaison	HDQ Headquarters

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