

Status: Currently Official on 16-Feb-2025
 Official Date: Official Prior to 2013
 Document Type: Reagents
 DocId: GUID-D98C28C0-22AE-413F-8BFF-7A4F354EE9B7_1_en-US
 DOI: https://doi.org/10.31003/USPNF_R2459_01_01
 DOI Ref: 508gz

© 2025 USPC
 Do not distribute

Sodium Ferrocyanide,

$\text{Na}_4\text{Fe}(\text{CN})_6 \cdot 10\text{H}_2\text{O}$ 484.06 CAS RN[®]: 13601-19-9.—Yellow crystals or granules. Freely soluble in water.

Assay: Dissolve 2 g, accurately weighed, in 400 mL of water, add 10 mL of sulfuric acid, and titrate with 0.1 N potassium permanganate VS. Each mL of 0.1 N potassium permanganate is equivalent to 48.41 mg of $\text{Na}_4\text{Fe}(\text{CN})_6 \cdot 10\text{H}_2\text{O}$. Not less than 98% is found.

Insoluble Matter (Reagent test): not more than 1 mg, from 10 g (0.01%).

Chloride (Reagent test): Dissolve 1 g in 75 mL of water, add a solution prepared by dissolving 1.2 g of cupric sulfate in 25 mL of water, mix, and allow to stand for 15 minutes. To 20 mL of the decanted, clear liquid add 2 mL of nitric acid and 1 mL of silver nitrate TS: any turbidity produced does not exceed that of a control containing 0.02 mg of Cl, 2 mL of nitric acid, 1 mL of silver nitrate TS, and sufficient cupric sulfate to match the color of the Test solution.

Sulfate: Dissolve 5 g in 100 mL of water without heating, filter, and to the filtrate add 0.25 mL of glacial acetic acid and 5 mL of barium chloride TS: no turbidity is produced in 10 minutes (about 0.01% as SO_4).

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

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

Most Recently Appeared In:

Pharmacopeial Forum: Volume No. Information currently unavailable

Current DocID: [GUID-D98C28C0-22AE-413F-8BFF-7A4F354EE9B7_1_en-US](#)

DOI: https://doi.org/10.31003/USPNF_R2459_01_01

DOI ref: [508gz](#)