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## Selenious Acid

(Selenous Acid),  $\text{H}_2\text{SeO}_3$  128.97 CAS RN<sup>®</sup>: 7783-00-8.—Colorless or white crystals, efflorescent in dry air and hygroscopic in moist air. Soluble in water and in alcohol.

**Assay:** Accurately weigh about 100 mg, transfer to a glass-stoppered flask, and dissolve in 50 mL of water. Add 10 mL of potassium iodide solution (3 in 10) and 5 mL of hydrochloric acid, mix, insert the stopper in the flask, and allow to stand for 10 minutes. Dilute with 50 mL of water, add 3 mL of starch TS, and titrate with 0.1 N sodium thiosulfate VS until the color is no longer diminished, then titrate with 0.1 N iodine VS to a blue color. Subtract the volume of 0.1 N iodine solution from the volume of 0.1 N sodium thiosulfate to give the volume of 0.1 N thiosulfate equivalent to selenious acid. Each mL of 0.1 N sodium thiosulfate is equivalent to 3.225 mg of  $\text{H}_2\text{SeO}_3$ ; not less than 93% is found.

**Insoluble Matter:** Dissolve 1 g in 5 mL of water: the solution is clear and complete.

**Residue on Ignition (Reagent test):** not more than 1.0 mg (0.01%), from 10 g.

**Selenate and Sulfate:** Dissolve 500 mg in 10 mL of water, and add 0.1 mL of hydrochloric acid and 1 mL of barium chloride TS: no turbidity or precipitate is formed within 10 minutes.

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

Topic/Question	Contact	Expert Committee
SELENIIOUS ACID	<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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