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Diatrizoate Sodium Solution

» Diatrizoate Sodium Solution is a solution of Diatrizoate Sodium in Purified Water, or a solution of Diatrizoic Acid in Purified Water prepared with the aid of Sodium Hydroxide. It contains not less than 95.0 percent and not more than 105.0 percent of the labeled amount of diatrizoate sodium ($C_{11}H_8I_3N_2NaO_4$). It may contain a suitable preservative.

Packaging and storage—Preserve in tight, light-resistant containers.

Labeling—Label the container to indicate that the contents are not intended for parenteral use.

USP Reference standards ⟨11⟩—

USP Diatrizoic Acid RS

Identification—

A: Dilute a volume of Solution, if necessary, with a 0.8 in 1000 solution of sodium hydroxide in methanol to obtain a test solution having a concentration of 1 mg per mL. The test solution responds to the *Thin-layer Chromatographic Identification Test ⟨201⟩*, the Standard solution being prepared at a concentration of 1 mg of USP Diatrizoic Acid RS per mL in a 0.8 in 1000 solution of sodium hydroxide in methanol, the solvent mixture being a mixture of chloroform, methanol, and ammonium hydroxide (20:10:2), and short-wavelength UV light being used to locate the spots.

B: Evaporate a volume of Solution, equivalent to about 500 mg of diatrizoate sodium, to dryness, and heat the residue so obtained in a suitable crucible: violet vapors are evolved.

pH ⟨791⟩: between 4.5 and 7.5.

Iodine and iodide—Using as the *Test preparation* a volume of Solution equivalent to 2.0 g of diatrizoate sodium and diluting it with water to 24 mL in a 50-mL centrifuge tube provided with a stopper, proceed as directed for *Procedure* in the test for *Iodine and iodide* under *Diatrizoate Meglumine*.

Assay—Pipet a volume of Solution, equivalent to about 400 mg of diatrizoate sodium, into a 125-mL conical flask. Add 30 mL of 1.25 N sodium hydroxide and 500 mg of powdered zinc, connect the flask to a reflux condenser, and reflux the mixture for 1 hour. Cool the flask to room temperature, rinse the condenser with 20 mL of water, disconnect the flask from the condenser, and filter the mixture. Rinse the flask and filter thoroughly, adding the rinsings to the filtrate. Add 5 mL of glacial acetic acid and 1 mL of tetrabromophenolphthalein ethyl ester TS, and titrate with 0.05 N silver nitrate VS until the yellow precipitate just turns green. Each mL of 0.05 N silver nitrate is equivalent to 10.60 mg of $C_{11}H_8I_3N_2NaO_4$.

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

Topic/Question	Contact	Expert Committee
DIATRIZOATE SODIUM SOLUTION	Documentary Standards Support	SM42020 Small Molecules 4

Chromatographic Database Information: Chromatographic Database

Most Recently Appeared In:
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