Naphazoline Nitrate

Naproxen

\[
\text{C}_14\text{H}_9\text{O}_2: \text{230.26} \\
(2S)-2-(6-Methoxynaphthalen-2-yl)propanoic acid \ [22204-53-1]
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Naproxen, when dried, contains not less than 98.5% of \(\text{C}_14\text{H}_9\text{O}_2\).

**Description** Naproxen occurs as white crystals or crystalline powder. It is odorless.

It is freely soluble in acetic acid (100), soluble in ethanol (95), sparingly soluble in water, slightly soluble in acetic anhydride, and practically insoluble in diethyl ether.

**Identification**

1. To 10 mL of a solution of Naphazoline Nitrate (1 in 100) add 5 mL of bromine TS, and boil: a deep purple color develops.

2. To 20 mL of a solution of Naphazoline Nitrate (1 in 100) add 5 mL of sodium hydroxide TS, and extract with two 25-mL portions of diethyl ether. Combine the diethyl ether extracts, evaporate to dryness with the aid of a current of air, and dry the residue at 80°C for 1 hour: the residue so obtained melts between 117°C and 120°C.

3. A solution of Naphazoline Nitrate (1 in 20) responds to the Qualitative Tests for nitrate.

**pH** Dissolve 0.1 g of Naphazoline Nitrate in 10 mL of freshly boiled and cooled water: the pH of the solution is between 5.0 and 7.0.

**Melting point** 167 - 170°C

**Purity**

1. Clarity and color of solution—Dissolve 0.5 g of Naphazoline Nitrate in 50 mL of water: the solution is clear and colorless.

2. Heavy metals—Proceed with 1.0 g of Naphazoline Nitrate according to Method 2, and perform the test. Prepare the control solution with 2.0 mL of Standard Lead Solution (not more than 20 ppm).

**Loss on drying** Not more than 0.5% (1 g, 105°C, 2 hours).

**Residue on ignition** Not more than 0.10% (1 g).

**Assay** Weigh accurately about 0.4 g of Naphazoline Nitrate, previously dried, dissolve in 10 mL of acetic acid (100) and 40 mL of acetic anhydride, and titrate with 0.1 mol/L perchloric acid VS (indicator: 3 drops of crystal violet TS). Perform a blank determination, and make any necessary correction.

Each mL of 0.1 mol/L perchloric acid VS
\[= 27.329 \text{ mg of } \text{C}_14\text{H}_9\text{N}_2\text{H}_2\text{O}_3\]

**Containers and storage** Containers—Tight containers.

Storage—Light-resistant.