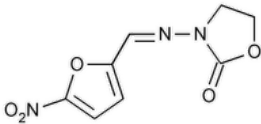


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Furazolidone



$C_8H_7N_3O_5$ 225.16
2-Oxazolidinone, 3-[(5-nitro-2-furanyl)methylene]amino]-.
3-[(5-Nitrofurfurylidene)amino]-2-oxazolidinone CAS RN®: 67-45-8; UNII: 5J9CPU3RE0.
» Furazolidone contains not less than 97.0 percent and not more than 103.0 percent of $C_8H_7N_3O_5$, calculated on the dried basis.

Packaging and storage—Preserve in tight, light-resistant containers, and avoid exposure to direct sunlight.

USP REFERENCE STANDARDS (11).—
[USP Furazolidone RS](#)

Identification—

Change to read:

A: [▲Spectroscopic Identification Tests \(197\), Infrared Spectroscopy: \(197K\)](#)▲ (CN 1-May-2020) : previously dried.

Change to read:

B: [▲Spectroscopic Identification Tests \(197\), Ultraviolet-Visible Spectroscopy: 197U](#)▲ (CN 1-May-2020)

Solution: 10 µg per mL.

C: Add about 50 mg to 10 mL of a freshly prepared mixture of dimethylformamide and alcoholic potassium hydroxide TS (9:1): the solution becomes purple, immediately changes to deep blue, and, upon standing for 10 minutes, again turns purple.

LOSS ON DRYING (731).—Dry it at 100° for 1 hour: it loses not more than 1.0% of its weight.

RESIDUE ON IGNITION (281): not more than 0.25%.

Assay—Transfer about 100 mg of Furazolidone, accurately weighed, to a 250-mL volumetric flask, dilute with dimethylformamide to volume, and mix. Transfer 5.0 mL of this solution to a 250-mL volumetric flask, dilute with water to volume, and mix (assay solution). Similarly, dissolve a suitable quantity of [USP Furazolidone RS](#), accurately weighed, in dimethylformamide to obtain a Standard stock solution having a known concentration of about 400 µg per mL. Transfer 5.0 mL of this stock solution to a 250-mL volumetric flask, dilute with water to volume, and mix (Standard solution). Concomitantly determine the absorbances of the assay solution and the Standard solution at the wavelength of maximum absorbance at about 367 nm, with a suitable spectrophotometer, using dimethylformamide solution (1 in 50) as the blank. Calculate the quantity, in mg, of $C_8H_7N_3O_5$ in the Furazolidone taken by the formula:

$$12.5C(A_u/A_s)$$

in which C is the concentration, in µg per mL, of [USP Furazolidone RS](#) in the Standard solution; and A_u and A_s are the absorbances of the assay solution and the Standard solution, respectively.

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

Topic/Question	Contact	Expert Committee
FURAZOLIDONE	Documentary Standards Support	SM32020 Small Molecules 3

Chromatographic Database Information: [Chromatographic Database](#)

Most Recently Appeared In:

Pharmacopeial Forum: Volume No. Information currently unavailable

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