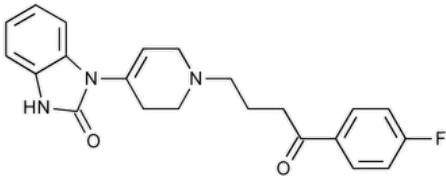


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Droperidol



$C_{22}H_{22}FN_3O_2$ 379.43
2H-Benzimidazol-2-one, 1-[1-[4-(4-fluorophenyl)-4-oxobutyl]-1,2,3,6-tetrahydro-4-pyridinyl]-1,3-dihydro-
1-1-[3-(*p*-Fluorobenzoyl)propyl]-1,2,[3,6-tetrahydro-4-pyridyl]-2-benzimidazolinone CAS RN®: 548-73-2; UNII: O9U0F09D5X.
» Droperidol, dried in vacuum at 70° for 4 hours, contains not less than 98.0 percent and not more than 102.0 percent of $C_{22}H_{22}FN_3O_2$.

Packaging and storage—Preserve in tight, light-resistant containers, under nitrogen, in a cool place.

USP Reference Standards (11).—
[USP Droperidol RS](#)

Identification—

Change to read:

A: ▲ [SPECTROSCOPIC IDENTIFICATION TESTS \(197\), Infrared Spectroscopy: 197K](#) ▲ (CN 1-May-2020) ·

Change to read:

B: ▲ [SPECTROSCOPIC IDENTIFICATION TESTS \(197\), Ultraviolet-Visible Spectroscopy: 197U](#) ▲ (CN 1-May-2020) —

Solution: 15 µg per mL.

Medium: 0.1 N hydrochloric acid in isopropyl alcohol (1 in 10).

Loss on Drying (731).—Dry it in vacuum at 70° for 4 hours: it loses not more than 5.0% of its weight.

Residue on Ignition (281).: not more than 0.2%.

Limit of 4,4'-bis[1,2,3,6-tetrahydro-4-(2-oxo-1-benzimidazoliny)-1-pyridyl]butyrophenone—Dissolve about 30.0 mg of the sample in 70 mL of isopropyl alcohol in a 100-mL volumetric flask. Add 10.0 mL of 0.1 N hydrochloric acid, dilute with isopropyl alcohol to volume, and mix. The absorptivity of the solution in 1-cm cells at the wavelength of maximum absorbance at about 330 nm, with a suitable spectrophotometer, using a 1 in 10 solution of 0.1 N hydrochloric acid in isopropyl alcohol as the blank, is not more than 0.7 (equivalent to limit of 1.5%).

Assay—Dissolve about 240 mg of Droperidol, previously dried and accurately weighed, in 50 mL of glacial acetic acid, add *p*-naphtholbenzein TS, and titrate with 0.1 N perchloric acid VS. Perform a blank determination, and make any necessary correction. Each mL of 0.1 N perchloric acid is equivalent to 37.94 mg of $C_{22}H_{22}FN_3O_2$.

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

Topic/Question	Contact	Expert Committee
DROPERIDOL	Documentary Standards Support	SM42020 Small Molecules 4

Chromatographic Database Information: [Chromatographic Database](#)

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