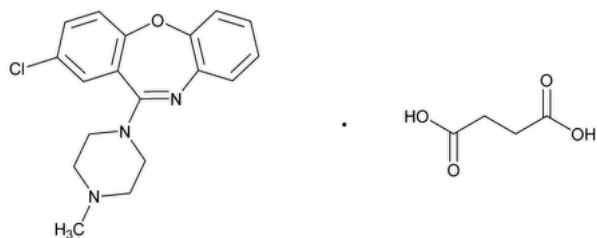


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Loxapine Succinate



$C_{18}H_{18}ClN_3O \cdot C_4H_6O_4$ 445.90
Butanedioic acid, compd. with 2-chloro-11-(4-methyl-1-piperazinyl)dibenz[b,f][1,4]oxazepine (1:1);
2-Chloro-11-(4-methyl-1-piperazinyl)dibenz[b,f][1,4]oxazepine succinate (1:1) CAS RN®: 27833-64-3; UNII: X59SG0MRYU.

Change to read:

DEFINITION

Loxapine Succinate contains NLT ▲98.0%▲ (USP 1-Aug-2022) and NMT ▲102.0%▲ (USP 1-Aug-2022) of loxapine succinate ($C_{18}H_{18}ClN_3O \cdot C_4H_6O_4$), calculated on the dried basis.

IDENTIFICATION

Change to read:

- **A. SPECTROSCOPIC IDENTIFICATION TESTS (197), Infrared Spectroscopy:** 197K ▲or 197A▲ (USP 1-Aug-2022)

Delete the following:

- ▲• **B. SPECTROSCOPIC IDENTIFICATION TESTS (197), Ultraviolet-Visible Spectroscopy:** 197U

Sample solution: 20 µg/mL in 0.01 N [hydrochloric acid](#)▲ (USP 1-Aug-2022)

Add the following:

- ▲• **B.** The retention time of the major peak of the *Sample solution* corresponds to that of the *Standard solution*, as obtained in the *Assay*.▲ (USP 1-Aug-2022)

ASSAY

Change to read:

• **PROCEDURE**

▲**Buffer:** 3.9 g/L of [ammonium acetate](#) in [water](#). Adjust with 20% [acetic acid](#) or [6 N ammonium hydroxide](#) to a pH of 7.3.

Solution A: *Buffer*

Solution B: [Acetonitrile](#)

Mobile phase: See [Table 1](#).

Table 1

Time (min)	Solution A (%)	Solution B (%)
0	70	30
1	70	30
18	20	80
20	20	80
21	70	30

Time (min)	Solution A (%)	Solution B (%)
25	70	30

Diluent: [Acetonitrile](#) and *Buffer* (70:30)

System suitability solution: 0.3 mg/mL of [USP Loxapine Succinate RS](#) and 0.45 µg/mL of [USP Loxapine Related Compound A RS](#) in *Diluent*

Standard solution: 0.3 mg/mL of [USP Loxapine Succinate RS](#) in *Diluent*

Sample solution: 0.3 mg/mL of Loxapine Succinate in *Diluent*

Chromatographic system

(See [Chromatography \(621\)](#), *System Suitability*.)

Mode: LC

Detector: UV 254 nm

Column: 4.6-mm × 10-cm; 2.7-µm packing [L1](#)

Column temperature: 35°

Flow rate: 1.4 mL/min

Injection volume: 10 µL

System suitability

Samples: *System suitability solution* and *Standard solution*

[NOTE—See [Table 2](#) for the relative retention times.]

Suitability requirements

Resolution: NLT 2.0 between loxapine and loxapine related compound A, *System suitability solution*

Tailing factor: NMT 2.0, *Standard solution*

Relative standard deviation: NMT 0.73%, *Standard solution*

Analysis

Samples: *Standard solution* and *Sample solution*

Calculate the percentage of loxapine succinate ($C_{18}H_{18}ClN_3O \cdot C_4H_6O_4$) in the portion of Loxapine Succinate taken:

$$\text{Result} = (r_U/r_S) \times (C_S/C_U) \times 100$$

r_U = peak response of loxapine from the *Sample solution*

r_S = peak response of loxapine from the *Standard solution*

C_S = concentration of [USP Loxapine Succinate RS](#) in the *Standard solution* (mg/mL)

C_U = concentration of Loxapine Succinate in the *Sample solution* (mg/mL) ▲ (USP 1-Aug-2022)

Acceptance criteria: ▲98.0%–102.0% ▲ (USP 1-Aug-2022) on the dried basis

IMPURITIES

• [RESIDUE ON IGNITION \(281\)](#): NMT 0.1%

Change to read:

• **ORGANIC IMPURITIES**

▲**Buffer, Mobile phase, Diluent, System suitability solution, Sample solution, and Chromatographic system:** Proceed as directed in the Assay.

Standard solution: 0.3 µg/mL each of [USP Loxapine Succinate RS](#) and [USP Loxapine N-Oxide RS](#) in *Diluent* ▲ (USP 1-Aug-2022)

System suitability

Samples: ▲*System suitability solution* and ▲ (USP 1-Aug-2022) *Standard solution*

▲[NOTE—See [Table 2](#) for the relative retention times.] ▲ (USP 1-Aug-2022)

Suitability requirements

Resolution: NLT 2.0 between loxapine ▲ (USP 1-Aug-2022) and loxapine related compound A, ▲*System suitability solution* ▲ (USP 1-Aug-2022)

Relative standard deviation: NMT 5.0% ▲ for loxapine *N*-oxide and loxapine, ▲ (USP 1-Aug-2022) *Standard solution*

▲**Signal-to-noise ratio:** NLT 10 for loxapine *N*-oxide, *Standard solution* ▲ (USP 1-Aug-2022)

Analysis

Samples: *Standard solution* and *Sample solution*

▲Calculate the percentage of loxapine *N*-oxide in the portion of Loxapine Succinate taken:

$$\text{Result} = (r_U/r_S) \times (C_S/C_U) \times 100$$