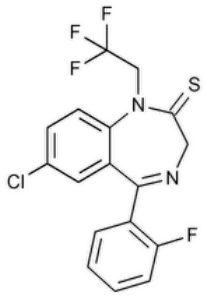
Status: Currently Official on 16-Feb-2025
Official Date: Official as of 01-Aug-2021
Document Type: USP Monographs
DocId: GUID-65CD273B-CD8A-467F-93B5-F4F8D4B12492_5_en-US
DOI: https://doi.org/10.31003/USPNF_M72390_05_01
DOI Ref: dl8qp

Quazepam



$C_{17}H_{11}ClF_4N_2S$ 386.79

2*H*-1,4-Benzodiazepine-2-thione, 7-chloro-5-(2-fluorophenyl)-1,3-dihydro-1-(2,2,2-trifluoroethyl)-.

7-Chloro-5-(*o*-fluorophenyl)-1,3-dihydro-1-(2,2,2-trifluoroethyl)-2*H*-1,4-benzodiazepine-2-thione CAS RN®: 36735-22-5; UNII: JF8V0828ZI.

» Quazepam contains not less than 98.5 percent and not more than 101.5 percent of $C_{17}H_{11}ClF_4N_2S$, calculated on the dried basis.

Packaging and storage—Preserve in well-closed containers.

Change to read:

USP Reference standards ⟨11⟩—

USP Quazepam RS
USP Quazepam Related Compound A RS

7-Chloro-▲5-(2-fluorophenyl)-1,3-dihydro-1-(2,2,2-trifluoroethyl)-▲ (ERR 1-Aug-2021) 2*H*-1,4-benzodiazepine-2-one.

Identification—

A: *Spectroscopic Identification Tests* ⟨197⟩, *Infrared Spectroscopy: 197M*.

B: The R_F value of the principal spot in the chromatogram of the *Test solution* obtained in the test for *Related compounds* corresponds to that in the chromatogram of *Standard solution A*.

Melting range ⟨741⟩: between 146° and 151°, but the range between beginning and end of melting does not exceed 2°.

Loss on drying ⟨731⟩—Dry it at 105° for 4 hours: it loses not more than 0.5% of its weight.

Residue on ignition ⟨281⟩: not more than 0.2%.

Related compounds—

Test solution—Prepare a solution of Quazepam in methylene chloride containing 20 mg per mL.

Standard solution A—Dissolve an accurately weighed quantity of USP Quazepam RS in methylene chloride to obtain a solution having a known concentration of about 20 mg per mL.

Standard solution B—Dissolve an accurately weighed quantity of USP Quazepam RS in methylene chloride to obtain a solution having a known concentration of about 0.04 mg per mL (0.2%).

Standard solution C—Dissolve an accurately weighed quantity of USP Quazepam Related Compound A RS in methylene chloride to obtain a solution having a known concentration of about 0.2 mg per mL (1%).

Procedure—Separately apply 5 µL of the *Test solution* and 5 µL of each of the *Standard solutions* to a thin-layer chromatographic plate (see *Chromatography* ⟨621⟩) coated with a 0.25-mm layer of chromatographic silica gel. Allow the spots to dry, and develop the chromatogram in a solvent system consisting of a mixture of cyclohexane, ethyl acetate, and ether (170:40:25) in a paper-lined tank until the solvent front has moved about three-fourths of the length of the plate. Remove the plate from the developing chamber, mark the solvent front, allow to air-dry, and examine the plate under short-wavelength UV light. Compare the intensity of the secondary spot in the chromatogram of the *Test solution* having the same R_F value as that of the primary spot of *Standard solution C:* the spot is not larger or more intense than the principal spot in the chromatogram of *Standard solution C.* Compare the intensities of any additional secondary spots observed in the chromatogram of the

Test solution with that of the principal spot in the chromatogram of *Standard solution B:* the sum of the intensities of the additional secondary spots obtained from the *Test solution* corresponds to not more than 0.2%.

Assay—Dissolve about 500 mg of Quazepam, accurately weighed, in 150 mL of acetic anhydride. Titrate with 0.1 N perchloric acid VS, determining the endpoint potentiometrically, using a glass-calomel electrode system. Perform a blank determination, and make any necessary correction. Each mL of 0.1 N perchloric acid is equivalent to 38.68 mg of $C_{17}H_{11}ClF_4N_2S$.

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

Topic/Question	Contact	Expert Committee
QUAZEPAM	Documentary Standards Support	SM42020 Small Molecules 4
REFERENCE STANDARD SUPPORT	RS Technical Services RSTECH@usp.org	SM42020 Small Molecules 4

Chromatographic Database Information: Chromatographic Database

Most Recently Appeared In:
Pharmacopeial Forum: Volume No. Information currently unavailable

Current DocID: GUID-65CD273B-CD8A-467F-93B5-F4F8D4B12492_5_en-US
DOI: https://doi.org/10.31003/USPNF_M72390_05_01
DOI ref: dl8qp