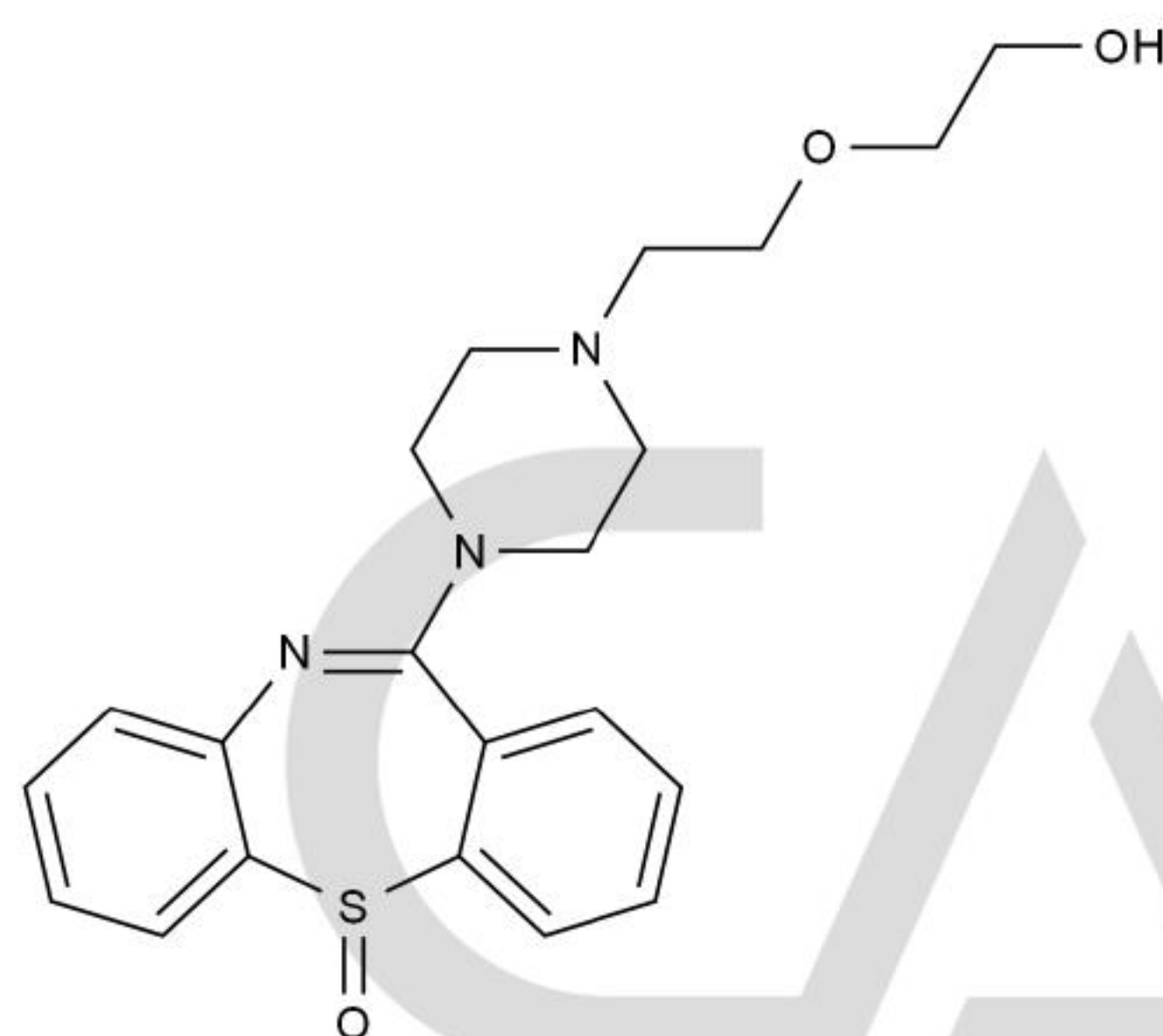


Certificate of Analysis

Reference Material & Standard

Product Name:	Quetiapine EP Impurity S	Catalogue Number:	C4X-124433
Synonyms:	11-{4-[2-(2-Hydroxyethoxy)ethyl]piperazin-1-yl}dibenzo[b,f][1,4]thiazepine 5-oxide	Lot Number:	0609-RH-0049
CAS Number:	329216-63-9	Expiry Date:	Jul 01, 2030
Molecular Formula:	C ₂₁ H ₂₅ N ₃ O ₃ S	Storage:	2°C ~ 8°C Sealed
Molecular Weight:	399.51	Shipping Condition:	Shipping at Room Temperature
Solubility:	Soluble in Acetonitrile and DMSO	Warning:	

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	Light Yellow Solid
Identification	LCMS&IR&CNMR&HNMR	Confirmed
Purity	HPLC	96.622%
Residue on Ignition	TGA	0.5344%
Loss on Drying	TGA	4.6156%
Assay	qNMR	91.1%
Assay	Mass Balance	91.6%

Comment:

- The retest date of this product is Jul 01, 2029.
- The calculation of the mass balance method follows the formula (calculated on the non-dried basis):

$$\text{Assay (\%)} = (100\% - \text{Residue on Ignition} - \text{Loss on Drying}) * \text{Purity HPLC (\%)} / 100\%$$
Residue on Ignition and Loss on Drying are considered as absolute effect, HPLC purity is considered as relative effect.

Signature:

Prepared by:

Koi

Reviewed by:

Alice

Approved by General Manager:

David

Date: Jul 02, 2026

Date: Jul 02, 2026

Date: Jul 02, 2026



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