

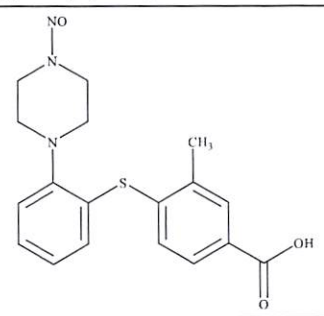
Certificate of Analysis

Certificate No.: 20240321001



Date: March 21, 2024

Retest date: March 19, 2027

Compound Name: <i>N</i> -Nitroso Vortioxetine Impurity 27	
Synonyms:	3-methyl-4-((2-(4-nitrosopiperazin-1-yl)phenyl)thio)benzoic acid
TLC Catalogue Number:	V-043117
CAS Number:	N/A
Molecular Weight:	357.43
Molecular Formula:	C ₁₈ H ₁₉ N ₃ O ₃ S
Source:	TLC Pharmaceutical Standards
Source Lot No.:	6195-014A3
Storage Conditions:	Store at 2-8 °C
Solubility:	Methanol, DMSO, DMF



Test Description	Specifications	Results
Visual Description	White to off-white solid	Conforms
Identification		
MS	Conforms to structure	Conforms
¹ H NMR	Conforms to structure	Conforms
Purity (HPLC)	Not less than 95.0%	99.9%
Impurity (HPLC)	N/A	
Water Content (KF)	N/A	0.2%
Residual Solvents (NMR)	2.0% acetonitrile	
Assay (%)	Not less than 90.0%	97.7%
Recommendation:	Release. The compound is an <i>N</i> -Nitroso product. Avoid using metal spatula and applying pressure. Wear proper personal protective equipment when handling.	

Name	Department	Signature	Date
Reviewed and approved by:	Quality Control		03/22/2024
Approved by:	Quality Assurance		03/22/2024

Attachments: HPLC, MS and NMR spectra.