

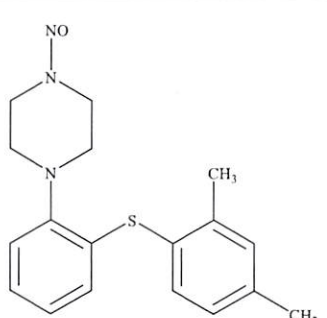
## Certificate of Analysis

Certificate No.: 20250306503-2



Date: March 6, 2025

Retest date: March 4, 2028

<b>Compound Name:</b> <i>N</i> -Nitroso Vortioxetine	
<b>Synonyms:</b>	1-(2-((2,4-dimethylphenyl)thio)phenyl)-4-nitrosopiperazine
<b>TLC Catalogue Number:</b>	V-043069
<b>CAS Number:</b>	2925447-38-5
<b>Alternate CAS Number:</b>	N/A
<b>Molecular Weight:</b>	327.45
<b>Molecular Formula:</b>	C <sub>18</sub> H <sub>21</sub> N <sub>3</sub> OS
<b>Source:</b>	TLC Pharmaceutical Standards
<b>Source Lot No.:</b>	4779-008A3
<b>Storage Conditions:</b>	Store at 2-8 °C
<b>Solubility:</b>	Methanol, DMSO, THF



Test Description	Specifications	Results
<b>Visual Description</b>	Off-white solid	<b>Conforms</b>
<b>Identification</b>		
MS	Conforms to structure	<b>Conforms</b>
<sup>1</sup> H NMR	Conforms to structure	<b>Conforms</b>
<b>Purity (HPLC)</b>	Not less than 95.0%	<b>99.7%</b>
<b>Impurity (HPLC)</b>	N/A	
<b>Water Content (KF)</b>	N/A	<b>0.1%</b>
<b>Residue (TGA at 800 °C)</b>	N/A	<b>0.0%</b>
<b>Residual Solvents (NMR)</b>	0.1% isopropyl ether	
<b>Assay (%)</b>	Not less than 90.0%	<b>99.5%</b>
<b>Recommendation:</b>	<b>Release.</b> The compound is a <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		08/26/2025
Approved by:	Quality Assurance		08/26/2025

**Attachments:** Peak Attribution Table, HPLC, MS, NMR and TGA spectra.