

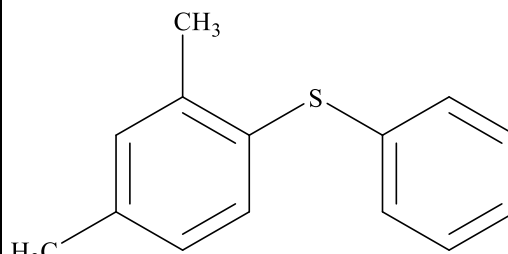
Certificate of Analysis

Certificate No.: 20210525003

Date: May 25, 2021

Retest date: May 20, 2024

Compound Name: Vortioxetine Impurity 16	
Synonyms:	(2,4-dimethylphenyl)(phenyl)sulfane
TLC Catalogue Number:	V-043017
CAS Number:	16704-47-5
Molecular Weight:	214.33
Molecular Formula:	C ₁₄ H ₁₄ S
Source:	TLC Pharmaceutical Standards
Source Lot No.:	1900-028A10
Storage Conditions:	Store at 2-8 °C
Solubility:	Methanol, DMSO



Test Description	Specifications	Results
Visual Description	Colourless liquid	Conforms
Identification		
IR	Conforms to structure	Conforms
MS	Conforms to structure	Conforms
¹H NMR	Conforms to structure	Conforms
Purity (HPLC)	Not less than 95.0%	99.0%
Impurity (HPLC)	RT 6.04, 0.68%	
Water Content (KF)	N/A	0.1%
Residual Solvents (NMR)	No residual solvent	
Assay (%)	Not less than 90.0%	98.9%
Recommendation:	Release.	

Name	Department	Signature	Date
Reviewed and approved by:	Quality Control		
Approved by:	Quality Assurance		

Attachments: HPLC, IR, MS and NMR spectra.