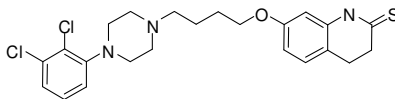




## Certificate of Analysis

**Axon Catalogue ID:** 1144 **Batch Number:** 1  
**Product Name:** Thio-aripiprazole  
**Alternative Name(s):** N.A.  
**IUPAC Name:** 7-(4-(4-(2,3-Dichlorophenyl)piperazin-1-yl)butoxy)-3,4-dihydroquinoline-2(1H)-thione

**Structure:**



**Amount:**

**CAS number(s):** 573691-04-0  
**Molecular Formula:** C<sub>23</sub>H<sub>27</sub>Cl<sub>2</sub>N<sub>3</sub>O<sub>2</sub>S **Molecular Weight:** 464.45  
**Batch Molecular Formula:** C<sub>23</sub>H<sub>27</sub>Cl<sub>2</sub>N<sub>3</sub>O<sub>2</sub>S **Batch Molecular Weight:** 464.45  
**Appearance:** White solid **Observed mp:** 139.7 - 141.5 °C  
**TLC (R<sub>f</sub>):** 0.7 DCM/MeOH (9:1)  
**Chemical Purity:** 99.5%  
**<sup>1</sup>H-NMR:** Analytical data confirm chemical structure  
**Mass Spec:** Analytical data confirm chemical structure  
**Microanalysis:** Calculated: C 59.48, H 5.86, N 9.05; Found: C 59.39, H 5.85, N 8.97  
**Storage Conditions:** Store at +4 °C

Solvent	Solubility (mg/ml)	Solubility (mM)	Remarks
Water	0.0	0.0	Insoluble
0.1N NaOH (aq)			Not Tested
0.1N HCl (aq)	0.0	0.0	Insoluble
DMSO	46.4	>100 mM	
EtOH	4.4	9.5	* Warming (40°C)

**Remarks:** \* Warming (40°C) enhanced solubility.

**QC Date:** 27-9-2023

The purity of Axon Ligands is confirmed by HPLC, MS, NMR and/or microanalysis. Analytical data are available upon request. Request can be submitted by e-mail to [info@axonmedchem.com](mailto:info@axonmedchem.com) indicating Catalogue ID and Batch number.

**Caution: Not fully tested. For research purposes only**