

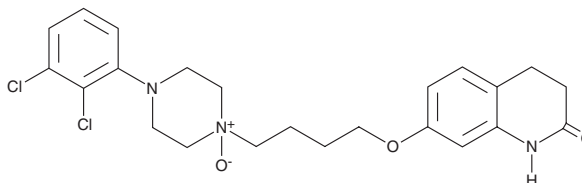
# PRODUCT INFORMATION



## Aripiprazole N-oxide

Item No. 35296

**CAS Registry No.:** 573691-09-5  
**Formal Name:** 7-[4-[4-(2,3-dichlorophenyl)-1-oxido-1-piperazinyl]butoxy]-3,4-dihydro-2(1H)-quinolinone  
**Synonym:** Aripiprazole N1-Oxide  
**MF:** C<sub>23</sub>H<sub>27</sub>Cl<sub>2</sub>N<sub>3</sub>O<sub>3</sub>  
**FW:** 464.4  
**Purity:** ≥90%  
**UV/Vis.:** λ<sub>max</sub>: 218 nm  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Aripiprazole N-oxide is supplied as a solid. A stock solution may be made by dissolving the aripiprazole N-oxide in the solvent of choice, which should be purged with an inert gas. Aripiprazole N-oxide is soluble in DMSO.

### Description

Aripiprazole N-oxide is a metabolite of the atypical antipsychotic aripiprazole (Item No. 19989).<sup>1,2</sup> It is formed from aripiprazole by the cytochrome P450 (CYP) isoforms CYP2D6 and CYP3A4.<sup>2</sup> Aripiprazole N-oxide is a potential impurity found in commercial preparations of aripiprazole.<sup>1</sup>

### References

1. Filijovic, N.D., Pavlović, A., Nikolic, K., *et al.* Validation of an HPLC method for determination of aripiprazole and its impurities in pharmaceuticals. *Acta Chromatogr.* **26(1)**, 13-28 (2014).
2. Satyanarayana, B., Sumalatha, Y., Kumar, S.S., *et al.* Synthesis and characterization of N-oxides and metabolites of antipsychotic drug, aripiprazole. *Heterocycl. Commun.* **11(6)**, 485-490 (2005).
3. Kubo, M., Koue, T., Inaba, A., *et al.* Influence of itraconazole co-administration and CYP2D6 genotype on the pharmacokinetics of the new antipsychotic aripiprazole. *Drug Metab. Pharmacokinet.* **20(1)**, 55-64 (2005).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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