

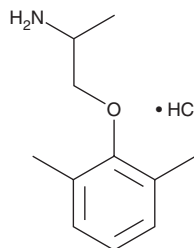
# PRODUCT INFORMATION



## Mexiletine (hydrochloride)

Item No. 23782

**CAS Registry No.:** 5370-01-4  
**Formal Name:** 1-(2,6-dimethylphenoxy)-2-propanamine, monohydrochloride  
**Synonym:** Ko 1173  
**MF:** C<sub>11</sub>H<sub>17</sub>NO • HCl  
**FW:** 215.7  
**Purity:** ≥98%  
**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

Mexiletine (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the mexiletine (hydrochloride) in the solvent of choice. Mexiletine (hydrochloride) is soluble in organic solvents such as methanol and chloroform, which should be purged with an inert gas.

### Description

Mexiletine is a voltage-gated sodium channel blocker and class Ib antiarrhythmic agent that preferentially binds to open/inactive channels.<sup>1</sup> It inhibits aconitine-induced dysrhythmias in mice with ED<sub>50</sub> values of 57 and 107 mg/kg for intraperitoneal and oral administration, respectively.<sup>2</sup> Mexiletine decreases or inhibits conduction across the Purkinje fiber-muscle junction, shortens action potential duration, and decreases the refractory period when used at concentrations less than 5 µg/ml in isolated canine Purkinje fiber and ventricular muscle preparations.<sup>3</sup>

### References

1. Roselli, M., Carocci, A., Budriesi, R., *et al.* Synthesis, antiarrhythmic activity, and toxicological evaluation of mexiletine analogues. *Eur. J. Med. Chem.* **121(1)**, 300-307 (2016).
2. Winslow, E. Evaluation of antagonism of aconitine-induced dysrhythmias in mice as a method of detecting and assessing antidysrhythmic activity. *Br. J. Pharmacol.* **71(2)**, 615-622 (1980).
3. Iwamura, N., Shimizu, T., Toyoshima, H., *et al.* Electrophysiological actions of a new antiarrhythmic agent on isolated preparations of the canine purkinje fiber and ventricular muscle. *Cardiology* **61(5-6)**, 329-340 (1976).

#### 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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