

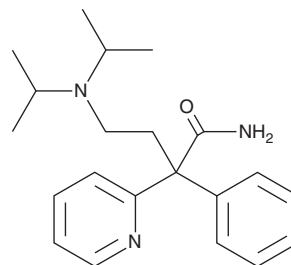
# PRODUCT INFORMATION



## Disopyramide

Item No. 23227

**CAS Registry No.:** 3737-09-5  
**Formal Name:**  $\alpha$ -[2-[bis(1-methylethyl)amino]ethyl]- $\alpha$ -phenyl-2-pyridineacetamide  
**Synonyms:** ( $\pm$ )-Disopyramide, Ritmilin, SC-7031  
**MF:** C<sub>21</sub>H<sub>29</sub>N<sub>3</sub>O  
**FW:** 339.5  
**Purity:**  $\geq$ 98%  
**UV/Vis.:**  $\lambda_{\text{max}}$ : 262 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:**  $\geq$ 4 years



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

### Laboratory Procedures

Disopyramide is supplied as a crystalline solid. A stock solution may be made by dissolving the disopyramide in the solvent of choice. Disopyramide is soluble in ethanol at a concentration of approximately 1 mg/ml. Disopyramide is also slightly soluble in chloroform and methanol.

### Description

Disopyramide is a sodium channel blocker that, in rabbit ventricular myocytes, binds and dissociates from open channels more quickly than from resting channels.<sup>1</sup> It is a class Ia antiarrhythmic agent that delays conduction through the AV node and ventricles of the dog heart both *in vivo* (3 and 5 mg/kg) and *in vitro* (1-2 mg/L).<sup>2</sup> Formulations containing disopyramide have been used in the treatment of cardiac arrhythmias and hypertrophic cardiomyopathy.<sup>3</sup>

### References

1. Grant, A.O., Wendt, D.J., Zilberter, Y., *et al.* Kinetics of interaction of disopyramide with the cardiac sodium channel: Fast dissociation from open channels at normal rest potentials. *J. Membr. Biol.* **136(2)**, 199-214 (1993).
2. Yeh, B.K., Sung, P.-K., and Scherlag, B.J. Effects of disopyramide on electrophysiological and mechanical properties of the heart. *J. Pharm. Sci.* **62(12)**, 1924-1929 (1973).
3. Verlinden, N.J., and Coons, J.C. Disopyramide for hypertrophic cardiomyopathy: A pragmatic reappraisal of an old drug. *Pharmacotherapy* **35(12)**, 1164-1172 (2015).

#### 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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