

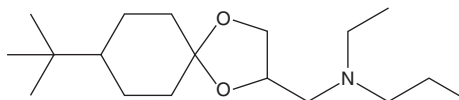
# PRODUCT INFORMATION



## Spiroxamine

Item No. 25823

CAS Registry No.: 118134-30-8  
Formal Name: 8-(1,1-dimethylethyl)-N-ethyl-N-propyl-1,4-dioxaspiro[4.5]decane-2-methanamine  
MF:  $C_{18}H_{35}NO_2$   
FW: 297.5  
Purity:  $\geq 95\%$   
Supplied as: An oil  
Storage:  $-20^{\circ}C$   
Stability:  $\geq 4$  years



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

### Laboratory Procedures

Spiroxamine is supplied as an oil. A stock solution may be made by dissolving the spiroxamine in the solvent of choice, which should be purged with an inert gas. Spiroxamine is slightly soluble in chloroform.

### Description

Spiroxamine is a tertiary amine fungicide and an inhibitor of  $\Delta^{14}$  reductase/ $\Delta^8 \rightarrow \Delta^7$  isomerase.<sup>1</sup> It inhibits the growth of *N. parvum*, *B. dothidea*, *D. seriata*, and *L. theobromae* isolates from grape vines ( $EC_{50}s = 0.97$ - $10.28$  mg/L).<sup>2</sup> Spiroxamine ( $0.03$ - $30$   $\mu M$ ) reduces network formation in rat cortical cultures.<sup>3</sup> It is also cytotoxic to MDA-kb2 cells ( $EC_{20} = 9.29$   $\mu M$ ).<sup>4</sup>

### References

1. Sui, G., Zhang, W., Zhou, K., *et al.* Trialkylamine derivatives containing a triazole moiety as promising ergosterol biosynthesis inhibitor: Design, synthesis, and antifungal activity. *Chem. Pharm. Bull. (Tokyo)* **65**(1), 82-89 (2017).
2. Amponsah, N.T., Jones, E., Ridgway, H.J., *et al.* Evaluation of fungicides for the management of Botryosphaeria dieback diseases of grapevines. *Pest Manag. Sci.* **68**(5), 676-683 (2012).
3. Frank, C.L., Brown, J.P., Wallace, K., *et al.* Developmental neurotoxicants disrupt activity in cortical networks on microelectrode arrays: Results of screening 86 compounds during neural network formation. *Toxicol. Sci.* **160**(1), 121-135 (2017).
4. Orton, F., Rosivatz, E., Scholze, M., *et al.* Widely used pesticides with previously unknown endocrine activity revealed as *in vitro* antiandrogens. *Environ. Health Perspect.* **119**(6), 794-800 (2011).

#### 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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