

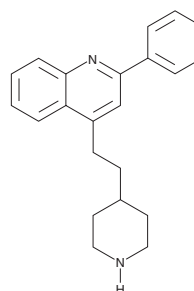
# PRODUCT INFORMATION



## Pipequaline

Item No. 23888

**CAS Registry No.:** 77472-98-1  
**Formal Name:** 2-phenyl-4-[2-(4-piperidiny)ethyl]-quinoline  
**Synonyms:** 45319 RP, PK 8165  
**MF:** C<sub>22</sub>H<sub>24</sub>N<sub>2</sub>  
**FW:** 316.4  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 257 nm  
**Supplied as:** A crystalline 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

Pipequaline is supplied as a crystalline solid. A stock solution may be made by dissolving the pipequaline in the solvent of choice, which should be purged with an inert gas. Pipequaline is soluble in the organic solvents DMSO and dimethyl formamide. The solubility of pipequaline in these solvents is approximately 20 and 10 mg/ml, respectively.

Pipequaline is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, pipequaline should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Pipequaline has a solubility of approximately 0.16 mg/ml in a 1:5 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Pipequaline is a partial agonist of central benzodiazepine receptors ( $K_i = 78$  nM in a radioligand binding assay).<sup>1</sup> In mice, pipequaline enhances the effects of diazepam (Item No. ISO60177), further reducing foot shock-induced fighting behavior and the number of maximal electroshock-induced seizures and potentiating the muscle relaxant and hypnotic effects.<sup>2</sup> Pipequaline also increases drinking in the Vogel punished drinking task indicating anxiolytic-like activity that can be reversed by the benzodiazepine receptor antagonist flumazenil (Item No. 14252).

### References

1. Le Fur, G., Mizoule, J., Burgevin, M.C., *et al.* Multiple benzodiazepine receptors: Evidence of a dissociation between anticonflict and anticonvulsant properties by PK 8165 and PK 9084 (two quinoline derivatives). *Life Sci.* **28(13)**, 1439-1448 (1981).
2. Mizoule, J., Rataud, J., Uzan, A., *et al.* Pharmacological evidence that PK 8165 behaves as a partial agonist of brain type benzodiazepine receptors. *Arch. Int. Pharmacodyn. Ther.* **271(2)**, 189-197 (1984).

#### 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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