

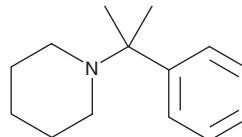
PRODUCT INFORMATION



2-Phenyl-2-(1-piperidinyl)propane

Item No. 17799

CAS Registry No.: 92321-29-4
Formal Name: 1-(1-methyl-1-phenylethyl)-piperidine
Synonyms: 1-(α,α -dimethylbenzyl)-Piperidine, PPP
MF: C₁₄H₂₁N
FW: 203.3
Purity: $\geq 95\%$
Supplied as: A solution in ethanol
Storage: -20°C
Stability: ≥ 2 years



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

Laboratory Procedures

2-Phenyl-2-(1-piperidinyl)propane is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO and dimethyl formamide purged with an inert gas can be used. The solubility of 2-phenyl-2-(1-piperidinyl)propane in these solvents is approximately 30 mg/ml.

2-Phenyl-2-(1-piperidinyl)propane is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of 2-phenyl-2-(1-piperidinyl)propane should be diluted with the aqueous buffer of choice. 2-Phenyl-2-(1-piperidinyl)propane has a solubility of 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

2-Phenyl-2-(1-piperidinyl)propane is an analog of phencyclidine that acts as a mechanism-based inactivator of human cytochrome P450 (CYP) 2B6 ($K_i = 5.6 \mu\text{M}$; $\text{IC}_{50} = 5.1 \mu\text{M}$).¹ It is 15-fold more selective for inhibition of CYP2B6 over CYP2D6 and 40-60-fold more selective for CYP2B6 over CYP1A2, CYP2A6, CYP2C8, and CYP3A.¹

Reference

1. Walsky, R.L., and Obach, R.S. A comparison of 2-phenyl-2-(1-piperidinyl)propane (PPP), 1,1',1''-phosphinothioylidynetrisaziridine (ThioTEPA), clopidogrel, and ticlopidine as selective inactivators of human cytochrome P450 2B6. *Drug Metab. Dispos.* **35(11)**, 2053-2059 (2007).

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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