

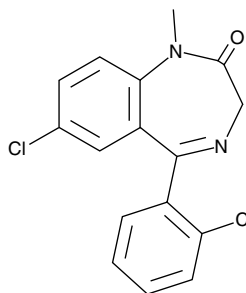
Product Information



Diclazepam

Item No. 15554

CAS Registry No.: 2894-68-0
Formal Name: 7-chloro-5-(2-chlorophenyl)-1,3-dihydro-1-methyl-2H-1,4-benzodiazepin-2-one
Synonyms: 2'-Chlorodiazepam, Ro 5-3448
MF: C₁₆H₁₂Cl₂N₂O
FW: 319.2
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ_{max}: 229 nm



Laboratory Procedures

For long term storage, we suggest that diclazepam be stored as supplied at -20°C. It should be stable for at least two years.

Diclazepam is supplied as a crystalline solid. A stock solution may be made by dissolving the diclazepam in the solvent of choice. Diclazepam is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of diclazepam in ethanol is approximately 10 mg/ml and approximately 30 mg/ml in DMSO and DMF.

Diclazepam is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, diclazepam should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Diclazepam has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Diazepam is a benzodiazepine drug that produces psychoactive effects by enhancing signaling through the γ-aminobutyric acid (GABA) receptor GABA_A.¹ Diclazepam is a 2'-chloro derivative of diazepam that has emerged as a designer drug.² It is metabolized *in vivo* into the pharmacologically active benzodiazepines delorazepam, lorazepam, and lormetazepam, which can be detected in urine for 6, 19, and 11 days, respectively.² The product is intended for forensic and research applications.

References

1. Birnir, B., Eghbali, M., Everitt, A.B., *et al.* Bicuculline, pentobarbital and diazepam modulate spontaneous GABA_A channels in rat hippocampal neurons. *Br. J. Pharmacol.* **131**(4), 695-704 (2000).
2. Moosmann, B., Bisel, P., and Auwärter, V. Characterization of the designer benzodiazepine diclazepam and preliminary data on its metabolism and pharmacokinetics. *Drug Test Anal.* (2014).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/15554

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman warrants only to the original customer that the material will meet our specifications at the time of delivery.

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Buyer's exclusive remedy and Cayman's sole liability hereunder shall be limited to a refund of the purchase price, or at Cayman's option, the replacement, at no cost to Buyer, of all material that does not meet our specifications.

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