

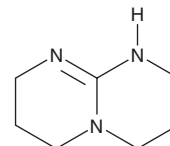
PRODUCT INFORMATION



1,5,7-Triazabicyclo[4.4.0]dec-5-ene

Item No. 20975

CAS Registry No.: 5807-14-7
Formal Name: 1,3,4,6,7,8-hexahydro-2H-pyrimido[1,2-a]pyrimidine
Synonyms: TBD, Triazabicyclodecene
MF: C₇H₁₃N₃
FW: 139.2
Purity: ≥95%
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

1,5,7-Triazabicyclo[4.4.0]dec-5-ene is supplied as a crystalline solid. A stock solution may be made by dissolving the 1,5,7-triazabicyclo[4.4.0]dec-5-ene in the solvent of choice, which should be purged with an inert gas. 1,5,7-Triazabicyclo[4.4.0]dec-5-ene is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 1,5,7-triazabicyclo[4.4.0]dec-5-ene in these solvents is approximately 30 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of 1,5,7-triazabicyclo[4.4.0]dec-5-ene can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of 1,5,7-triazabicyclo[4.4.0]dec-5-ene in PBS, pH 7.2, is approximately 2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

1,5,7-Triazabicyclo[4.4.0]dec-5-ene is a bicyclic guanidine base that can be used as a catalyst for a variety of base-mediated organic transformations, including Michael additions, Wittig reactions, Henry reactions, and transesterification reactions.¹

Reference

1. Pratt, R.C., Lohmeiher, B.G.G., Long, D.A., *et al.* Triazabicyclodecene: A simple bifunctional organocatalyst for acyl transfer and ring-opening polymerization of cyclic esters. *J. Am. Chem. Soc.* **128**(14), 4556-4557 (2006).

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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