

Product Name: Bendamustine hydrochloride

Catalog No.: 3681

Batch No.: 1

CAS Number: 3543-75-7

IUPAC Name: 5-[Bis(2-chloroethyl)amino]-1-methyl-1*H*-benzimidazole-2-butanoic acid hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₆H₂₁Cl₂N₃O₂.HCl.1½H₂O

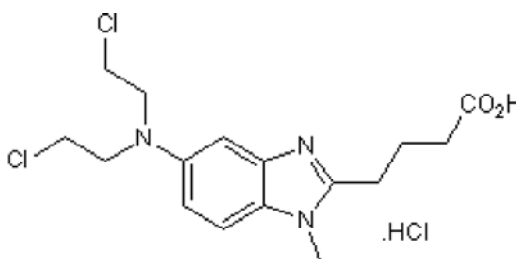
Batch Molecular Weight: 421.74

Physical Appearance: White solid

Solubility: water to 25 mM
DMSO to 100 mM
ethanol to 100 mM

Storage: Desiccate at RT

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 98.4% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon Hydrogen Nitrogen		
Theoretical	45.57	5.97	9.96
Found	45.6	5.67	10.02

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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Description:

Cytostatic agent that displays activity in non-Hodgkin's lymphomas. Exhibits bifunctionality; combines DNA alkylating properties with those of purine analogs.

Physical and Chemical Properties:

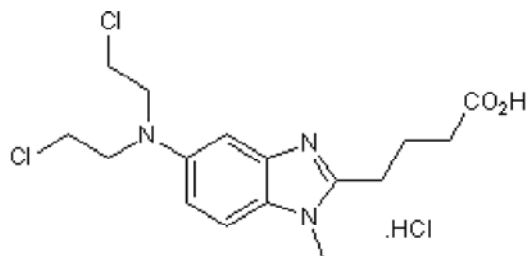
Batch Molecular Formula: C₁₆H₂₁Cl₂N₃O₂.HCl.1½H₂O

Batch Molecular Weight: 421.74

Physical Appearance: White solid

Minimum Purity: ≥98%

Batch Molecular Structure:



Storage: Desiccate at RT

Solubility & Usage Info:

water to 25 mM

DMSO to 100 mM

ethanol to 100 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Masiello and Tulpule (2009) Bendamustine therapy in chronic lymphocytic leukemia. *Expert Opin.Pharmacother.* **10** 1687. PMID: 19527193.

Keating et al (2008) Bendamustine. *Nat.Rev.Drug Discov.* **7** 473. PMID: 18511926.

Schwanen et al (2002) *In vitro* evaluation of bendamu. induced apoptosis in B-chronic lymphocytic leukemia. *Leukemia.* **16** 2096. PMID: 12357363.

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