

Certificate of Analysis

Product Name: SNAP

Catalog No.: 0598

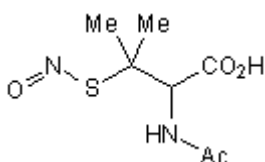
Batch No.: 13

CAS Number: 79032-48-7

IUPAC Name: (S)-Nitroso-N-acetylpenicillamine

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₇H₁₂N₂O₄S·¼H₂O
Batch Molecular Weight: 224.74
Physical Appearance: Green solid
Solubility: DMSO to 100 mM
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

¹H NMR: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	37.41	5.61	12.46
Found	37.68	5.33	12.47

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

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Description:

A stable analog of endogenous S-nitroso compounds. A source of NO in vivo which unlike organic O-nitrates does not induce tolerance. Decomposes slowly in solution with a $t_{1/2}$ of 37h.

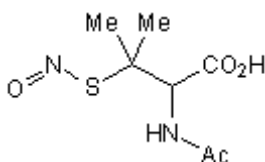
Physical and Chemical Properties:

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Solubility & Usage Info:

DMSO 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:

Ferrero et al (1999) Comparative effects of several nitric oxide donors on intracellular cyclic GMP levels in bovine chromaffin cells: correlation with nitric oxide production. *Br.J.Pharmacol.* **127** 779. PMID: 10401570.

Ekblad and Sundler (1997) Motor responses in rat ileum evoked by nitric oxide donors vs. field stimulation: modulation by pituitary adenylate cyclase-activating peptide, forskolin and guanylate cyclase inhibitors. *J.Pharmacol.Exp.Ther.* **283** 23. PMID: 9336304.

Cross et al (1994) Neurotoxicity in conscious rats following intraventricular SNAP, a nitric oxide donor. *Neuropharmacology* **33** 915. PMID: 7969812.

Bauer and Fung (1991) Differential thermodynamic effects and tolerance properties of nitroglycerin and S-nitrosothiol in experimental heart failure. *J.Pharmacol.Exp.Ther.* **256** 249. PMID: 1899118.

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bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel:+1 612 379 2956