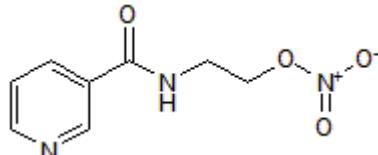


Certificate of Analysiswww.tocris.com**Product Name:** Nicorandil**Catalog No.:** 2147**Batch No.:** 1

CAS Number: 65141-46-0

EC Number: 265-514-1

IUPAC Name: *N*-[2-(Nitrooxy)ethyl]-3-pyridinecarboxamide**1. PHYSICAL AND CHEMICAL PROPERTIES****Batch Molecular Formula:** C₈H₉N₃O₄·0.1H₂O**Batch Molecular Weight:** 212.98**Physical Appearance:** White solid**Solubility:** water to 20 mM**Storage:** Desiccate at +4°C**Batch Molecular Structure:****2. ANALYTICAL DATA****TLC:** R_f = 0.51 (Dichloromethane:Methanol [9:1])**¹H NMR:** Consistent with structure**Microanalysis:** Carbon Hydrogen Nitrogen

Theoretical 45.12 4.35 19.73

Found 45.04 4.2 19.67

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Product Information

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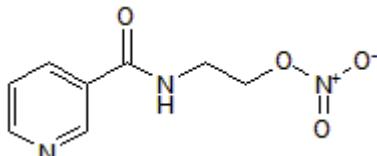
Batch No.: 1**Description:**

K_i6 (K_{ATP}) channel opener and NO donor; antianginal agent. Preferentially activates SUR2B- versus SUR2A-containing K_i6 channels (EC₅₀ values are 10 and > 500 μM respectively) and causes 1.6-fold increase in cardiac eNOS expression. Displays coronary and peripheral vasodilatory properties, reduces both pre- and after-load, and increases coronary blood flow. Also displays cardioprotective effects, possibly through ischemic preconditioning.

Physical and Chemical Properties:Batch Molecular Formula: C₈H₉N₃O₄·0.1H₂O

Batch Molecular Weight: 212.98

Physical Appearance: White solid

Batch Molecular Structure:**Storage:** Desiccate at +4°C**Solubility & Usage Info:**

water to 20 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:

Shindo *et al* (1998) SUR2 subtype (A and B)-dependent differential activation of the cloned ATP-sensitive K⁺ channels by pinacidil and nicorandil. *Br.J.Pharmacol.* **124** 985. PMID: 9692785.

Horinaka *et al* (2001) Nicorandil enhances cardiac endothelial nitric oxide synthase expression via activation of adenosine triphosphate-sensitive K channel in rat. *J.Cardiovasc.Pharmacol.* **38** 200. PMID: 11483869.

Gomma *et al* (2001) Potassium channel openers in myocardial ischaemia: therapeutic potential of nicorandil. *Drugs* **61** 1705. PMID: 11693460.

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