



CERTIFICATE OF ANALYSIS

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1. Identification

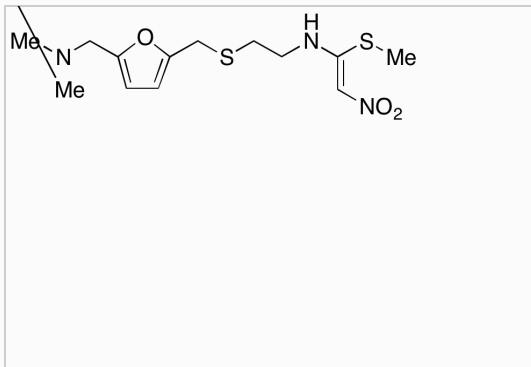
Catalogue Number: D473580

CAS Number: 72115-14-1

Product: N,N-Dimethyl-5-[[[2-[[1-(methylthio)-2-nitroethyl]amino]ethyl]thio]methyl]-2-furanmethanamine

Synonym: Ranitidine Impurity

Structure:



Molecular Formula:

C₁₃H₂₁N₃O₃S₂

Molecular weight:

331.45

Source of Product:

Synthetic

Solubility:

Chloroform (Slightly),
Methanol (Slightly)

Lot Number: 2-YHU-109-3

Purity: 98%

Shipping Condition: This Product Is Stable To Be Shipped At Room Temperature

Storage Condition: 4°C

2. Warning

Warning 1:

Warning 2:

Warning 3:

3. Analytical Information

| Tests: | Specifications: | Results: |
|-------------|-----------------------------|-------------------|
| Appearance | White to Light Yellow Solid | Pale Yellow Solid |
| NMR | Conforms to Structure | Conforms |
| MS | Conforms to Structure | Conforms |
| HPLC Purity | Report Result | 99.48% (230 nm) |

Additional Information: N/A

Purity is based on the analytical results of the tests performed. NMR and Elemental Analysis (if available) may have an accuracy of ± 2%. Isotopic purity is based on mass distribution observed. The contents of the specifications are subject to change without advance notice, and the specification values displayed here are the most up to date values.

4. Signatures

| Reviewed By | Reviewed By | C of A Approved By | Test Date | Retest Date |
|------------------|---------------|--------------------|------------|-------------|
| Meenakshi Sharma | Toni Rantanen | Chanell Chu | 10/13/2021 | 10/11/2025 |