

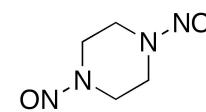
CERTIFICATE OF ANALYSIS

1. Identification

Catalogue Number D480420 Lot Number 4-MOM-66-1

Product Name
1,4-Dinitrosopiperazine

Synonyms
N,N'-Dinitrosopiperazine; NSC 339; DNP;

Structure

CAS Number 140-79-4 Solubility DMSO (Slightly), Methanol (Slightly)

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

Molecular Formula C₄H₈N₄O₂ Source of Product Synthetic

Long Term Storage Conditions
-20°C, Hygroscopic

Molecular Weight 144.13 Purity >95%

2. Warnings

Hygroscopic

3. Analytical Information

<u>Tests</u>	<u>Specifications</u>	<u>Results</u>
Appearance	White to Pale Yellow Solid	White to Off-White Solid
NMR	Conforms to Structure	Conforms
Elemental Analysis	Conforms	%C: 33.32, %H: 5.50, %N: 38.57
GC Purity	>95%	100.00%
MS	Conforms to Structure	Conforms

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 \pm 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

<u>Reviewed by</u>	<u>Reviewed by</u>	<u>C of A Approved by</u>	<u>Test Date</u>	<u>Retest Date</u>
			2/29/2024	2/27/2028

Henry Tieu Toni Rantanen Chanell Chu
Product Quality Specialist Manager, Quality Assurance Quality Assurance Associate