CERTIFICATE OF ANALYSIS

(Certificate No. KMN001007-01)

Release Date: 11/03/2024 **Re-test Date:** 10/03/2027

1,4-Dinitrosopiperazine

Identification

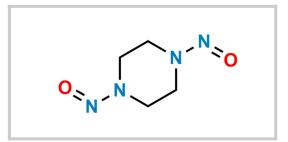
Chemical Name: 1,4-dinitrosopiperazine

CAT No. : KMN001007

CAS No. : 140-79-4

Molecular Formula : C4H8N4O2

Molecular Weight : 144.13



Analytical Information

 $\textbf{Batch No.} \hspace{1.5cm} : PIP-DI-N-NO-073-115 \hspace{1.5cm} \textbf{Solubility} \hspace{1.5cm} : ACN: Water (1:1)$

: Light Yellow Solid **Description** Mass : Confirm **HPLC Purity** : 99.98 % IR : Confirm Weight Loss By TGA : 1.44 % 1H NMR : Confirm % Potency : 98.54 % **13C NMR** : Confirm

Additional Information

Long Term Storage : Store at 2-8 deg. C for long term storage

Shipping Condition : Product is stable to be shipped at room temperature

% Potency = [100 - 1.44(Weight Loss By TGA)] x [99.98(HPLC Purity)]/100 = 98.54 %

-13CNMR added on 29.11.2024

Recommendation : Released

	Department	Name	Signature	Date
Prepared By	Analytical	Parag Patel		18/01/2025
Reviewed & Approved By	Quality Control	Jatin Patel		18/01/2025

Attachments : COA, HPLC, MASS, 1HNMR, 13CNMR IR and TGA