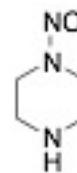


CERTIFICATE OF ANALYSIS

1. Identification

<u>Catalogue Number</u>	<u>Lot Number</u>	<u>Structure</u>
N545350	19-EQJ-144-1	
<u>Product Name</u>		
N-Nitrosopiperazine		



Synonyms

1-Nitrosopiperazine; N-Mononitrosopiperazine; NSC 50269; NSC 525340;

<u>CAS Number</u>	<u>Solubility</u>	<u>Shipping Condition</u>
5632-47-3	Chloroform (Slightly), Methanol (Slightly)	This Product Is Stable To Be Shipped At Room Temperature
<u>Molecular Formula</u>	<u>Source of Product</u>	<u>Long Term Storage Conditions</u>
C ₄ H ₉ N ₃ O	Synthetic	-20°C, Light sensitive
<u>Molecular Weight</u>	<u>Purity</u>	
115.13	>95%	

2. Warnings

Light Sensitive

3. Analytical Information

<u>Tests</u>	<u>Specifications</u>	<u>Results</u>
Appearance	Colourless to Yellow Oil to Semi-Solid	White to Yellow Oil
NMR	Conforms to Structure	Conforms
Elemental Analysis	Conforms	%C: 40.55, %H: 7.68, %N: 35.30
GC Purity	>95%	99.79%
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>
			6/21/2025	6/19/2029
Swathi Reddy Product Quality Specialist	Toni Rantanen Manager, Quality Assurance	Chanell Chu Quality Assurance Associate		