



CERTIFICATE OF ANALYSIS

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1. Identification

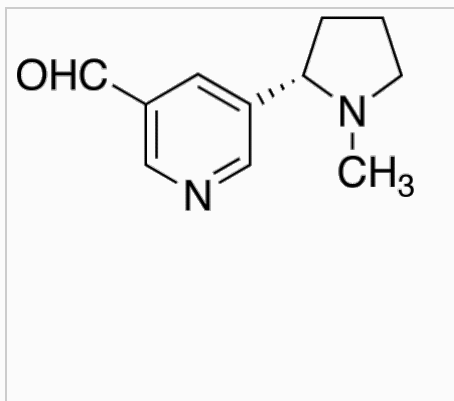
Catalogue Number: N413775

CAS Number: 852238-97-2

Product: S-(-)-Nicotine-5-carboxaldehyde

Synonym: 5-[(2S)-1-Methyl-2-pyrrolidinyl]-3-pyridinecarboxaldehyde;

Structure:



Molecular Formula:

C₁₁H₁₄N₂O

Molecular weight:

190.24

Source of Product:

Synthetic

Solubility:

Chloroform (Slightly),
Dichloromethane, Ethyl
Acetate, Methanol (Slightly)

Lot Number: 13-SHG-181-2

Purity: 98%

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

Storage Condition: -20°C

2. Warning

Warning 1: Not Determined

Warning 2:

Warning 3:

3. Analytical Information

Tests:	Specifications:	Results:
Appearance		Dark Yellow Oil
NMR	Conforms to Structure	Conforms
MS	Conforms to Structure	Conforms
GC	>95%	99.38%

Additional Information: NA

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

Reviewed By	Reviewed By	C of A Approved By	Test Date	Retest Date
Neha Khanna	Xhoana Gjergji	My Nguyen	12/21/2018	12/19/2028