



CERTIFICATE OF ANALYSIS

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1. Identification

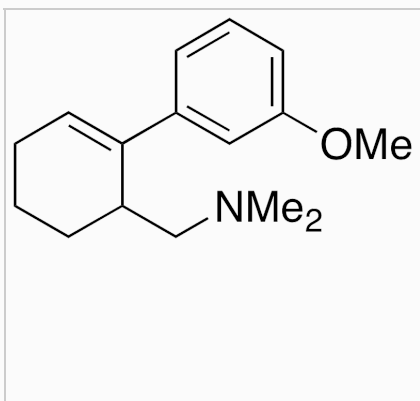
Catalogue Number: D230385

CAS Number: 192384-41-1

Product: 1,6-Dehydro Tramadol

Synonym: 2-(3-Methoxyphenyl)-N,N-dimethyl-2-cyclohexene-1-methanamine; Tramadol Impurity C,

Structure:



Molecular Formula:

C₁₆H₂₃NO

Molecular weight:

245.36

Source of Product:

Synthetic

Solubility:

Chloroform (Slightly),
Methanol (Slightly), Toluene
(Slightly)

Lot Number: 7-KSS-94-6

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	Colourless to Pale Yellow Oil	Clear Colourless Oil
NMR	Conforms to Structure	Conforms
MS	Conforms to Structure	Conforms
HPLC Purity	>95%	99.12% (214 nm)

Additional Information:

TLC Conditions: SiO₂; Dichloromethane : Methanol : Ammonium Hydroxide = 9 : 1 : 0.1; Visualized with UV and KMnO₄; Single Spot, R_f = 0.70.

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
Neha Khanna	Toni Rantanen	My Nguyen	12/17/2019	12/15/2026