



CERTIFICATE OF ANALYSIS

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1. Identification

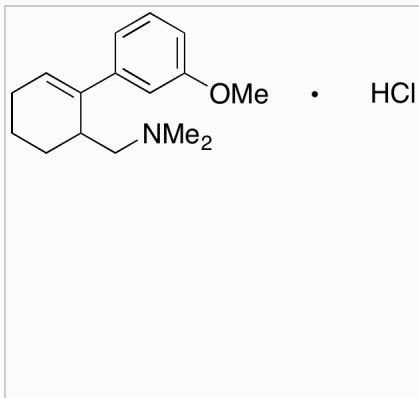
Catalogue Number: D230390

CAS Number: 66170-31-8

Product: 1,6-Dehydro Tramadol Hydrochloride

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

Structure:



Molecular Formula:

C₁₆H₂₄ClNO

Molecular weight:

281.82

Source of Product:

Synthetic

Solubility:

Chloroform (Slightly), Ethyl Acetate (Slightly, Heated, Sonicated), Methanol (SI

Lot Number: 7-KSS-101-2

Purity: 98%

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

Storage Condition: 4°C

2. Warning

Warning 1:

Warning 2:

Warning 3:

3. Analytical Information

Tests:	Specifications:	Results:
Appearance	White to Off-White Solid	White Solid
Elemental Analysis	Conforms	%C: 65.46, %H: 8.52, %N: 4.76
HPLC Purity	Report Result	97.37% (215 nm)
MS	Conforms to Structure	Conforms
NMR	Conforms to Structure	Conforms
Specific Rotation	Report Result	0.0° (c = 0.5, Methanol)
Water Content	Report Result	~3.4% based on Elemental Analysis

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 ± 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
Swathi Reddy	Henry Tieu	Chanell Chu	7/13/2021	7/11/2025