

# **CERTIFICATE OF ANALYSIS**

## 1. Identification

Product Name

Procyclidine-d11 Hydrochloride

### <u>Synonyms</u>

α-Cyclohexyl-α-phenyl-1-(pyrrolidine)propanol Hydrochloride-d11; (±)-Procyclidine-d11 Hydrochloride; 1-Cyclohexyl-1-phenyl-3-(pyrrolidino)-1-propanol Hydrochloride-d11; Arpicolin-d11; Kemadrin-d11; Kemadrin-d11; Tricyclamol-d11 Hydrochloride

CAS Number Solubility

N/A Chloroform (Slightly), Methanol

(Slightly)

Molecular Formula Source of Product

 $C_{19}H_{18}D_{11}NO$  (HCI) Synthetic

Molecular Weight Purity 298.51+(36.46) 97%

**Shipping Condition** 

This Product Is Stable To Be Shipped At Room

Temperature

Long Term Storage Conditions

4°C

# 2. Warnings

3. Analytical Information

<u>Tests</u>	<u>Specifications</u>	Results
Appearance	White to Off-White Solid	White Solid
NMR	Conforms to Structure	Conforms
Elemental Analysis	Conforms	%C: 67.90, %H: 8.90, %N: 4.52
HPLC Purity	Report Result	99.73% (210 nm)
MS	Conforms to Structure	Conforms
Isotopic Purity	>95%	99.3%

### **Additional Information**

Normalized Intensity:  $d_0 = 0.01\%$ ,  $d_1 = 0.00\%$ ,  $d_2 = 0.02\%$ ,  $d_3 = 0.01\%$ ,  $d_4 = 0.00\%$ ,  $d_5 = 0.00\%$ ,  $d_6 = 0.00\%$ ,  $d_7 = 0.00\%$ ,  $d_8 = 0.01\%$ ,  $d_9 = 0.26\%$ ,  $d_{10} = 6.45\%$ ,  $d_{11} = 93.24\%$ 

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

Reviewed by C of A Approved by Test Date

Swathi Reddy Toni Rantanen Chanell Chu

Product Quality Specialist Manager, Quality Assurance Jr. Quality Assurance