





## Certificate of Analysis

For Laboratory Use Only

**PRODUCT NAME** Harmane

**PART NUMBER** 00008043

**STANDARD TYPE** Analytical Standard (AS)

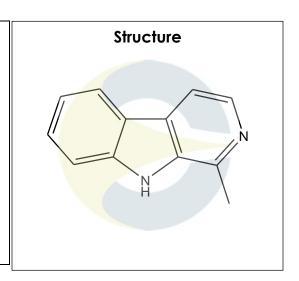
**LOT NUMBER** 0008043-662

**REPORT NUMBER** CDXA-RSS-7107-01

SAMPLE NUMBER CDXA-16-003921

**DATE OF SAMPLE** 03/28/2016 **DATE OF RE-EVALUATION** 03/09/2021

**DATE OF REPORT** 03/29/2021



**CHEMICAL NAMES** 1-Methyl-9*H*-pyrido[3,4-*b*]indole; 1-Methyl-β-carboline; Aribine

CHEMICAL FORMULA C<sub>12</sub>H<sub>10</sub>N<sub>2</sub>

MOLECULAR WEIGHT (MW) 182.22

CHEMICAL FAMILY Alkaloids

**CAS NUMBER** [486-84-0]

**EC#(EINECS)** 207-642-2

**RTECS** UV0280000

### **ANALYTICAL RESULTS**

TEST	METHOD	SPECIFICATION	RESULT	
HPLC	0.700.10.2.METH22	≥ 75%	99.5%	
Mass Spectrum	Direct Infusion: ESI (+)	Conforms	Conforms	
Appearance	NA	NA	White powder	

#### STORAGE CONDITIONS

STORAGE Room Temperature in a dry place.

EXPIRATION DATE 03/2026 under the above conditions.







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### **ANALYTICAL CONDITIONS**

INSTRUMENT AGILENT 1260 HPLC UV-VIS (DAD); AGILENT 6510 QTOF

**COLUMN** Phenomenex Luna C18(2) 150 x 2.00 mm, 5 μm particle size

MOBILE PHASE A - 0.1% Trifluoroacetic acid in Ultrapure water, B - Acetonitrile;

Isocratic 5% B for 5 minutes, then increasing to 95% B over 20 minutes. Hold at

95% B for 15 minutes.

COLUMN TEMP. 60 °C

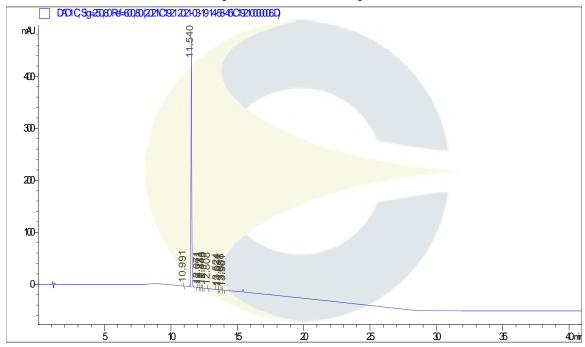
**FLOW RATE** 0.4 mL/minute

INJECTION VOL. 0.1 μL

**INJECTION CONC.** 1.2 mg/mL in Methanol

**DETECTION**  $250 \pm 40 \text{ nm}$ 

## HPLC CHROMATOGRAM OF HARMANE (CDXA-16-003921)





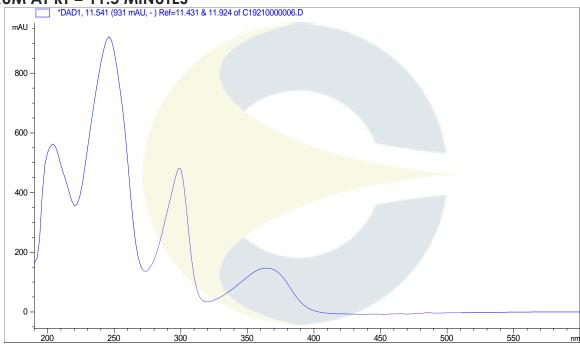




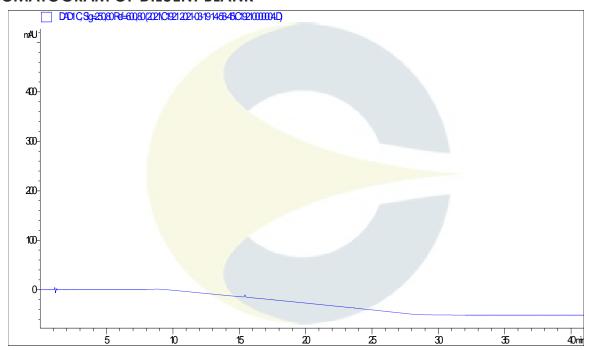
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### **UV SPECTRUM AT RT = 11.5 MINUTES**



### HPLC CHROMATOGRAM OF DILUENT BLANK





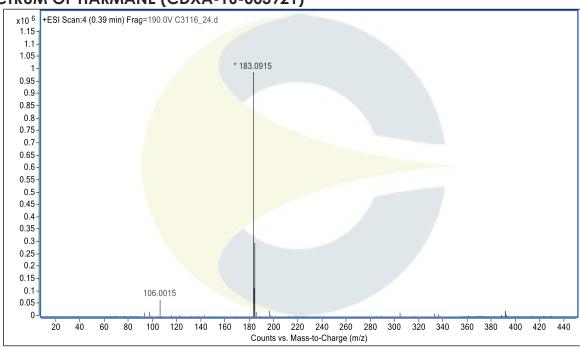




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## MASS SPECTRUM OF HARMANE (CDXA-16-003921)



### **REVISION HISTORY**

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	04/22/2016	New report
01	03/29/2021	Passed re-evaluation by HPLC. Updated expiration date, analytical results, analytical conditions, and chromatograms. Removed melting point.