



INDOFINE Chemical Company, Inc.

121 Stryker Lane, Bldg. 30, Suite 1 • Hillsborough, NJ 08844 • U.S.A.

Phone: (908) 359-6778 • FAX: (908) 359-1179

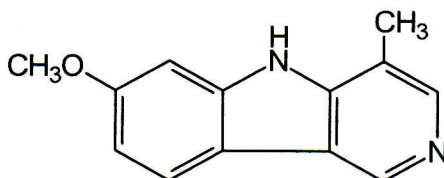
website: www.indofinechemical.com

e-mail: chemical@indofinechemical.com

CERTIFICATE OF ANALYSIS

Cat. No.: H-005

<u>Product:</u>	HARMINE (Banisterine)
<u>CAS Number:</u>	[442-51-3]
<u>Lot No.:</u>	1012090
<u>Molecular Formula:</u>	C ₁₃ H ₁₂ N ₂ O
<u>Molecular Weight:</u>	212.25
<u>Appearance:</u>	Off white crystalline powder
<u>Melting Point:</u>	260-262°C
<u>TLC:</u>	Chloroform:Methanol (8:2)
<u>Solubility:</u>	Soluble in DMSO
<u>Moisture (KF):</u>	0.10%
<u>Assay (HPLC):</u>	99.99%





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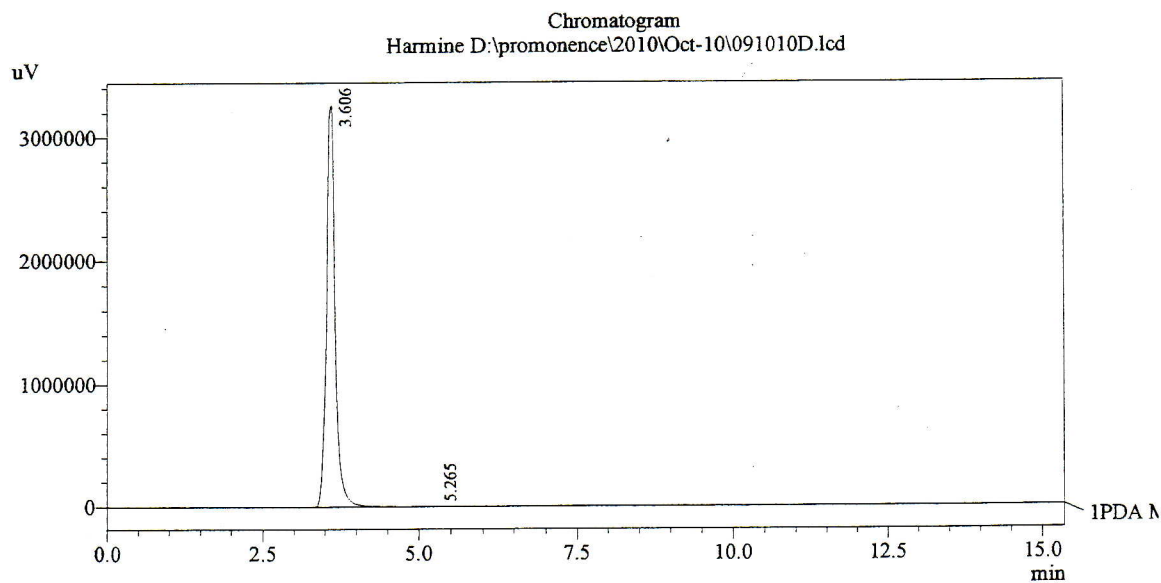
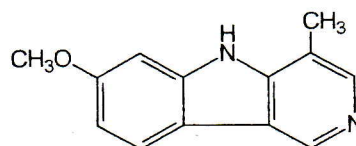
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HPLC ANALYSIS

Date Acquired : 10/9/2010 11:40:39 AM
Acquired by : Madhuri
Sample Name : Harmine
Sample ID :
Injection Volume : 20 uL
Data Filename : 091010D.lcd
Method Filename : Linear Isocratic.M.lcm

Cat. No.: H-005
Product name: Harmine
Lot No.: 1012090

Description:
Column : Inertsil C-18, 250X4.6mm 5.0µm
Flow : 0.500ML/min.
Mobile Phase : A(20% of 0.05% ofTFA) : B(80% ACN)



1 PDA Multi 1 / 360nm 4nm

PeakTable

PDA Ch1 360nm 4nm

Peak#	Ret. Time	Area	Height	Area %
1	3.606	31339640	3259014	99.990
2	5.265	3256	310	0.010
Total		31342896	3259324	100.000



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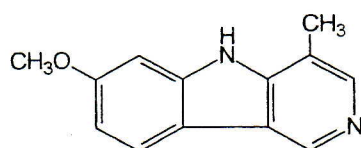
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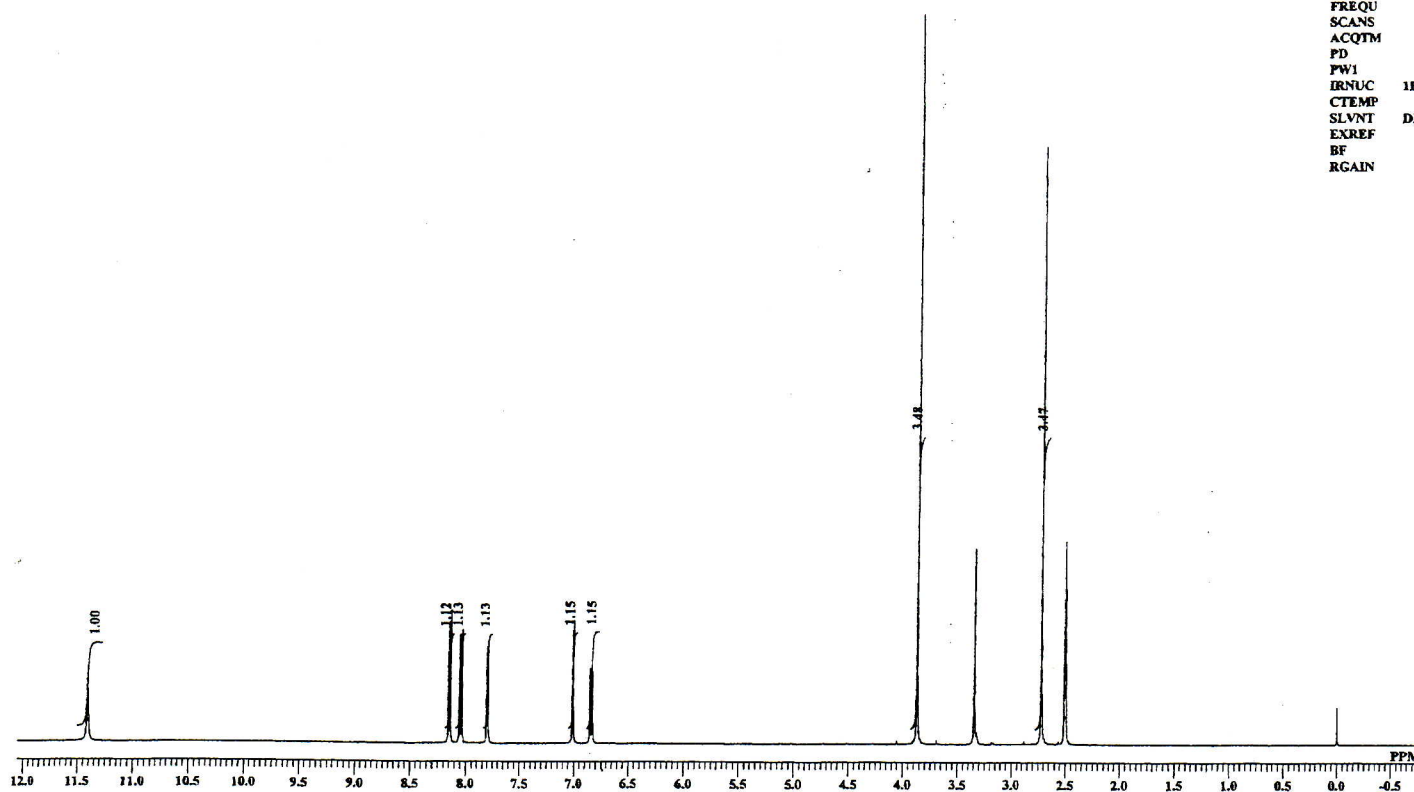
e-mail: chemical@indofinechemical.com

Cat. No.: H-005
Product name: Harmine
Lot No.: 1012090



SR/4 1H NMR DMSO-D6

DFILE SR-4.a
COMNT SR/4 1H NMR DM
DATIM Tue Nov 30 16:22:4
OBNUC 1H
EXMOD NON
OBFRQ 399.65 MHz
OBSET 124.00 KHz
OBFIN 10500.00 Hz
POINT 65536
FREQU 7992.01 Hz
SCANS 8
ACQTM 8.2002 sec
PD 3.0000 sec
PW1 5.60 usec
IRNUC 1H
CTEMP 23.5 c
SLVNT DMSO
EXREF 0.00 ppm
BF 0.50 Hz
RGAIN 18





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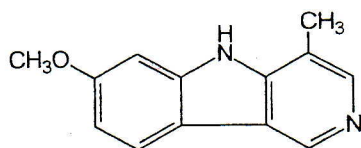
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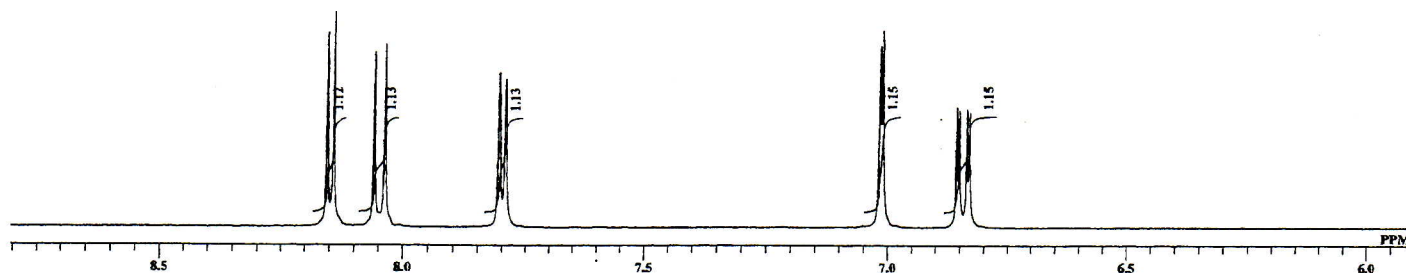
e-mail: chemical@indofinechemical.com

Cat. No.: H-005
Product name: Harmine
Lot No.: 1012090



SR/4 1H NMR DMSO-D6

DFILE	SR-4.xls
COMNT	SR/4 1H NMR DM
DATIM	Tue Nov 30 16:22:4
OBNUC	1H1
EXMOD	NON
OBFRQ	399.65 MHz
OBSET	124.00 KHz
OBFIN	10500.00 Hz
POINT	65536
FREQU	7992.01 Hz
SCANS	8
ACQTM	8.2602 sec
PD	3.0000 sec
PW1	5.60 usec
IRNUC	1H1
CTEMP	23.5 c
SLVNT	DMSO
EXREF	0.00 ppm
BF	0.50 Hz
RGAIN	18





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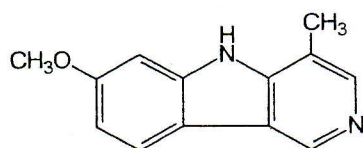
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BIOSYN RESEARCH CHEMICALS PVT LTD
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COMNT SR/4 1H NMR DM
DATIM Tue Nov 30 16:22:4
OBNUC 1H
EXMOD NON
OBFRQ 399.65 MHz
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