



# 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](http://www.indofinechemical.com)

e-mail: [chemical@indofinechemical.com](mailto:chemical@indofinechemical.com)

## CERTIFICATE OF ANALYSIS

Cat No.: H-001

Product: HARMALINE

CAS Number: [304-21-2]

Lot Number: 0309150

Chemical Formula: C<sub>13</sub>H<sub>14</sub>N<sub>2</sub>O

Molecular Weight: 214.27

Melting Point: 239-243°C

Appearance: Cream color powder

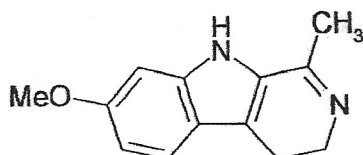
Solubility: Soluble in DMSO

TLC: Chloroform: Methanol (9:1)

NMR Spectrum: Enclosed

Storage: Store at 2-8°C

Purity(HPLC): 98.51%





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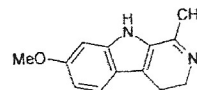
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## HPLC ANALYSIS

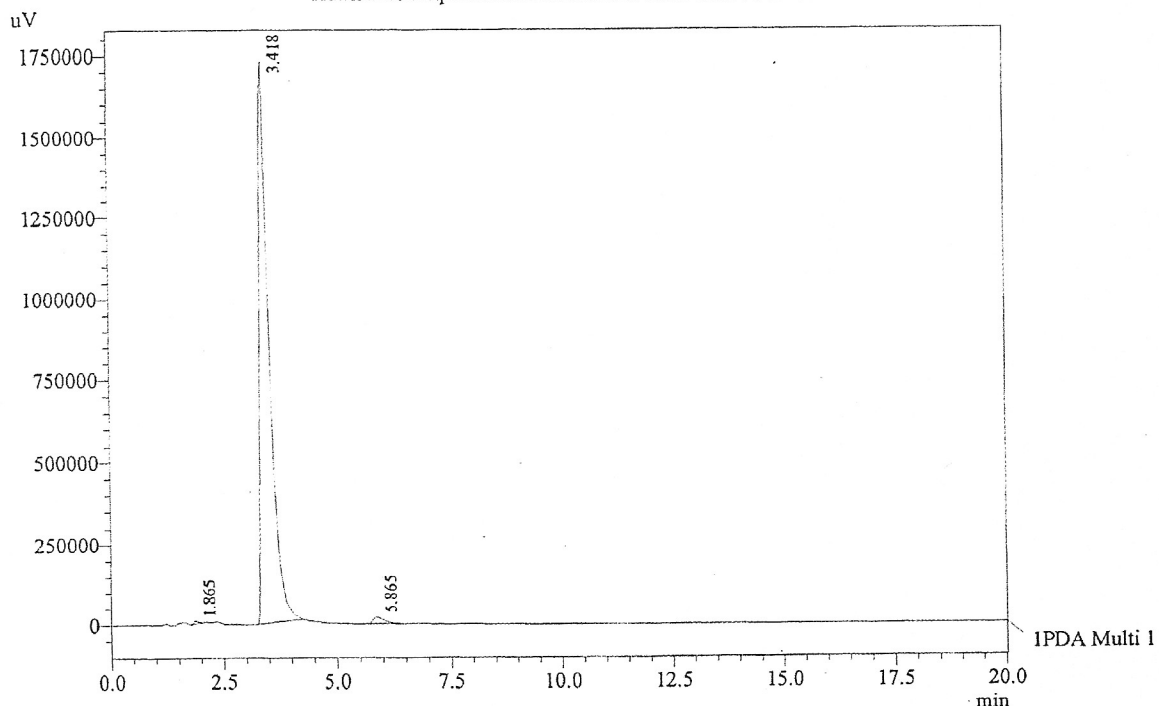
Acquired by : Sanjeev  
Sample Name : Harmaline  
Sample ID : Lot No:- 0309150  
Injection Volume : 20 uL  
Data Filename : 290113H.lcd  
Method Filename : Isocratic Method.lcm

Catalog No.: H-001  
Product name: Harmaline  
Lot No.: 0309150



Column : Inertsil ODS, (250mm x4.6mm 5.0µ)  
Flow : 1.500 mL/min.  
Mobile Phase : Phosphate buffer:Acetonitrile(550:450)

Chromatogram  
Harmaline D:\promonence\Data\2013JAN-2013\290113H.lcd



1 PDA Multi 1 / 210nm 4nm

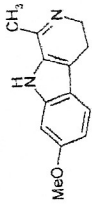
PeakTable

Peak#	Name	Ret. Time	Area	Area %	Relative Retention Time
1	RT:1.865	1.865	46373	0.18	0.55
2	Harmaline	3.418	25609376	98.51	1.00
3	RT:5.865	5.865	341726	1.31	1.72
Total			25997475	100.00	



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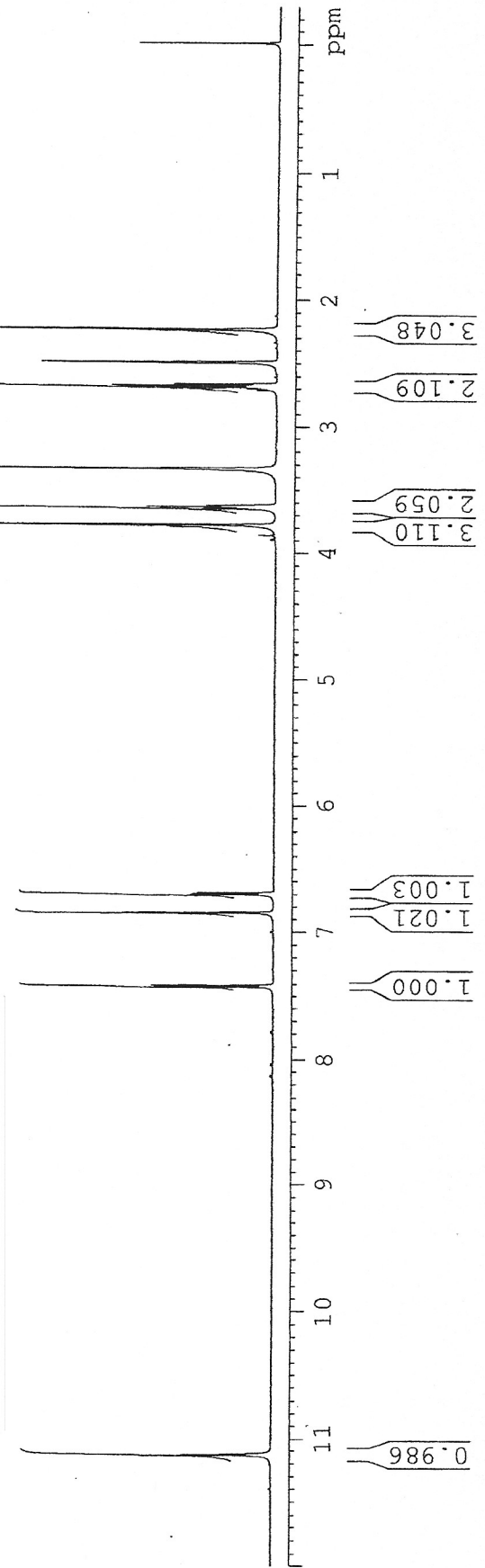
Catalog No.: H-001  
Product name: Harmaline  
Lot No.: 0309150



1H IN DMSO  
AVANCE-600

SOLVENT DMSO  
NS 24  
DS 0  
SWH 10416.667 Hz  
FIDRES 0.347245 Hz  
AQ 1.4399540 sec  
RG 2050  
DW 48.000 usec  
DE 6.00 usec  
TE 298.3 K  
D1 1.50000000 sec  
TD0 1

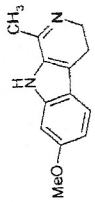
==== CHANNEL f1 =====  
NUC1 1H  
P1 8.50 usec  
PL1 -1.00 dB  
PL1W 15.17893314 W  
SF01 600.3348676 MHz  
SI 32768  
SF 600.3300116 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.00





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SOLVENT DMSO  
NS 24  
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DE 6.00 usec  
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TD0 1

1H IN DMSO  
AVANCE-600

===== CHANNEL f1 =====  
NUC1 1H  
P1 8.50 usec  
PL1 -1.00 dB  
PL1W 15.17893314 W  
SF01 600.3348676 MHz  
SI 32768  
SF 600.3300116 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.00

