



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

Catalog Number: H-005

Product Name: **HARMINE**

CAS Number: [442-51-3]

Lot No.: 2007440

Molecular Formula: C₁₃H₁₂N₂O

Molecular Weight: 212.25

Appearance: Off-white powder

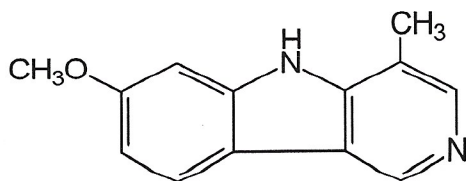
Melting Point: 266-268°C

Water Content: 0.14%

TLC: Chloroform:Methanol (9:1)

Storage: Store in a cool, dry place.
Keep package airproofed when not in use.

Purity (HPLC): 99.88%



Prepared by:
Ramesh Mandadi
Ramesh Mandadi
Director of Operations

Reviewed and approved by:
Sujata Moton
S. Moton
VP



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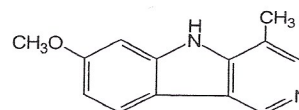
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HPLC ANALYSIS

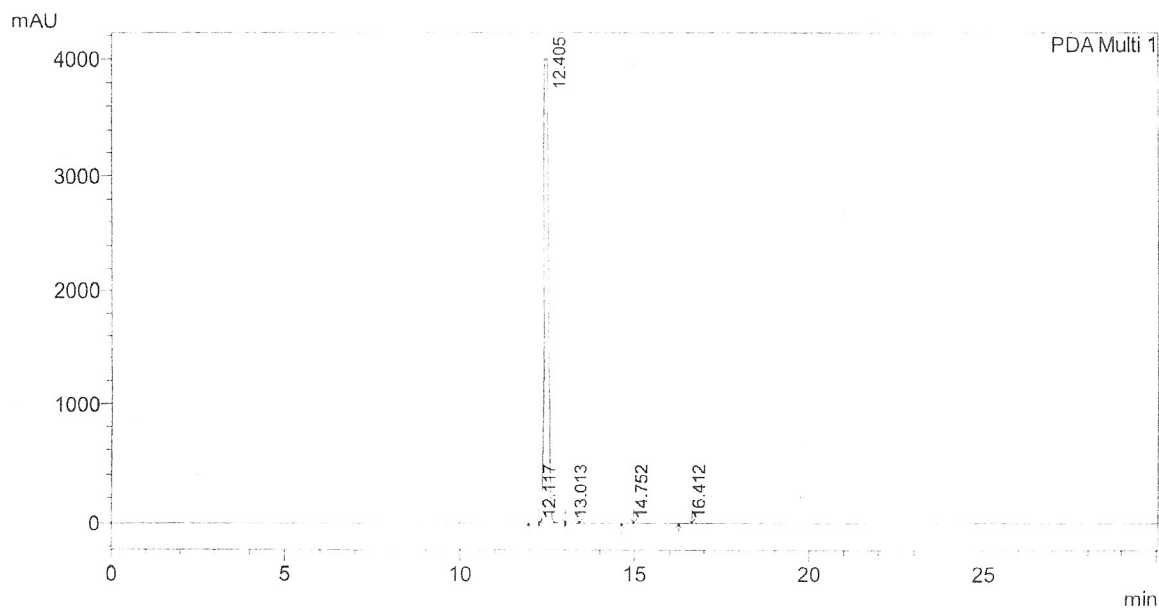
Acquired by : Sanjeev
Sample Name : Harmine
Sample ID : B8M|Harmine
Vial # : 3
Injection Volume : 20 uL
Data File Name : 30062020334.lcd
Method File Name : General Method (A-C).lcm

Catalog No.: H-005
Product Name: Harmine
Lot No.: 2007440



Column: Inertsil ODS-3V : 250 x 4.6mm, 5u
Flow Rate: 1.0 ml/min
MP-A: 20mM KH₂PO₄ (Adj pH-3, with OPA): MP-B: Methanol
Gradient Program: 0.01/10, 12/90, 20/90, 23/10, 30/10 (% of B Conc)
Diluent: Methanol

<Chromatogram>



1 PDA Multi 1/320nm 4nm

PeakTable

PDA Ch1 320nm 4nm

Peak#	Name	Ret. Time	Area	Area %	Relative Retention Time
1	HRMLN	12.117	20766	0.06	1.000
2	HRMN	12.405	35802883	99.88	1.024
3	RT:13.013	13.013	9572	0.03	1.074
4	RT:14.752	14.752	8468	0.02	1.217
5	RT:16.412	16.412	4900	0.01	1.354
Total			35846590	100.00	

Prepared by:

Ramesh Mandadi

Ramesh Mandadi

Director of Operations

Reviewed and approved by:

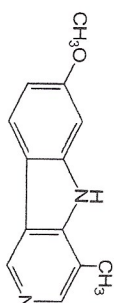
Sujata Moton

S. Moton

VP

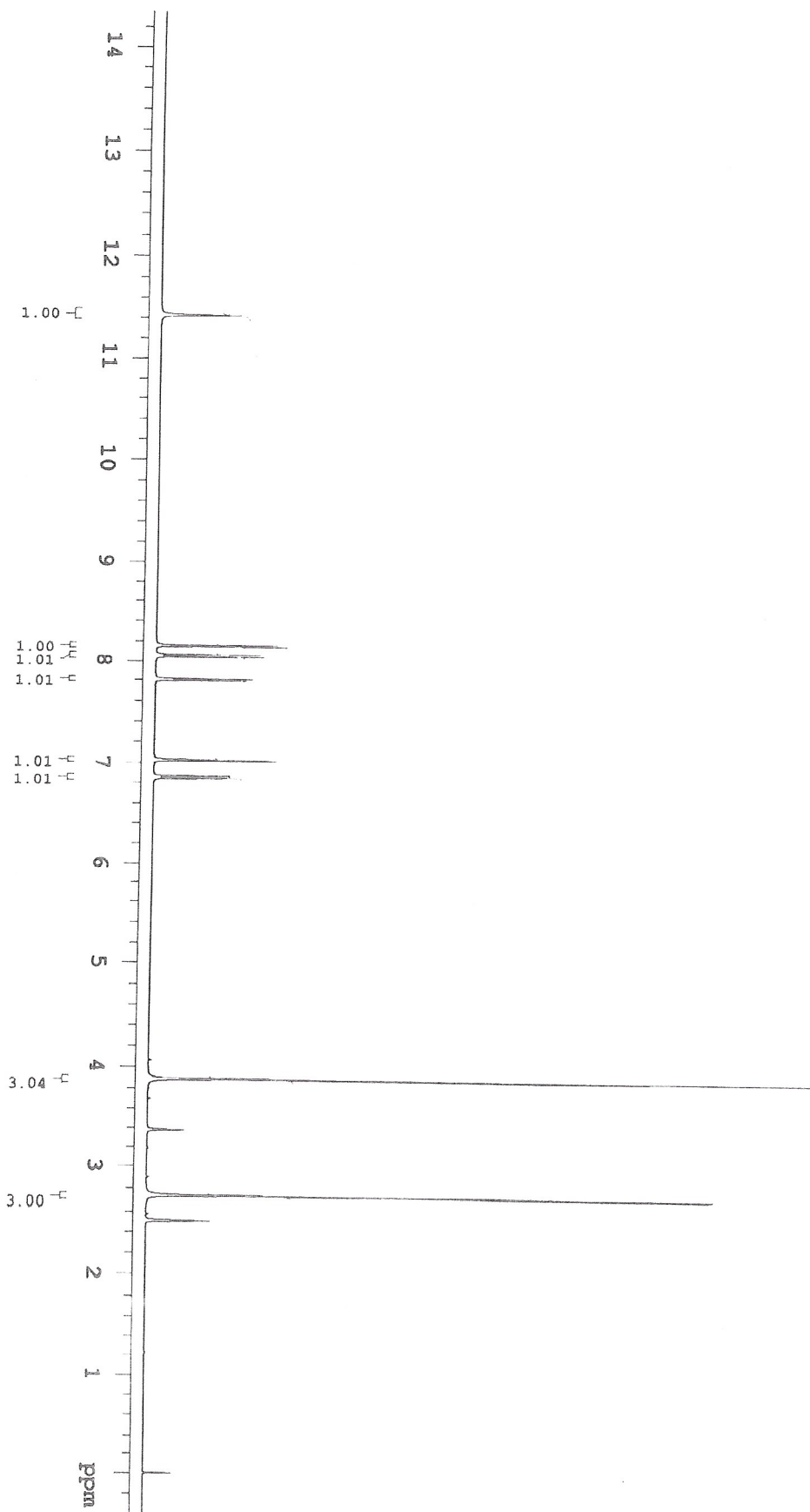


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Catalog No.: H-005
Product Name: Harmine
Lot No.: 2007440

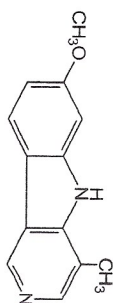
VARIAN 400MHz NMR
Solvent: dmsc
Date: Jul 1 2020



Plotname: HORMINE_PROTON_01_plot01



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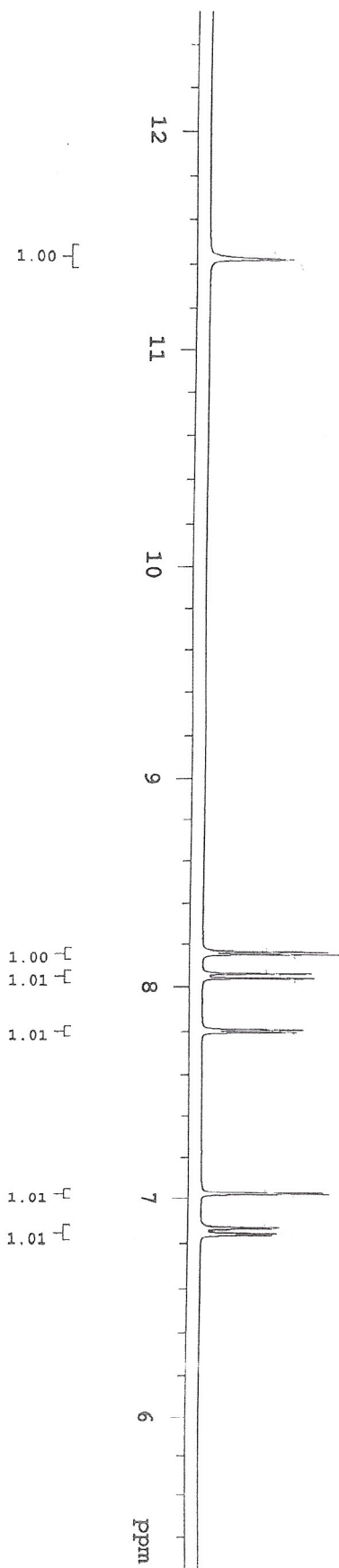
Catalog No.: H-005
Product Name: Harmine
Lot No.: 2007440

VARIAN 400MHZ NMR
Solvent: dmso
Date: Jul 1 2020

11.428

8.165
8.151
8.061
8.040
7.809
7.796

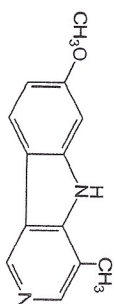
7.027
7.022
6.863
6.857
6.841
6.835



Plotname: HORMINE_PROTON_01_plot02

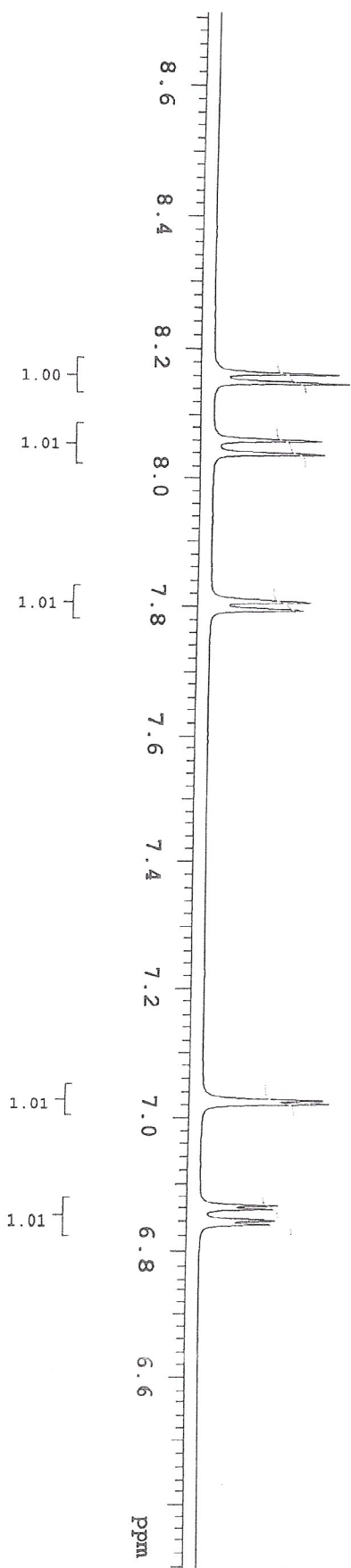


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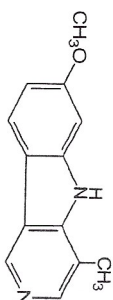
VARIAN 400MHz NMR
Solvent: dmsd
Date: Jul 1 2020



Plotname: HORMINE_PROTON_01_plot03

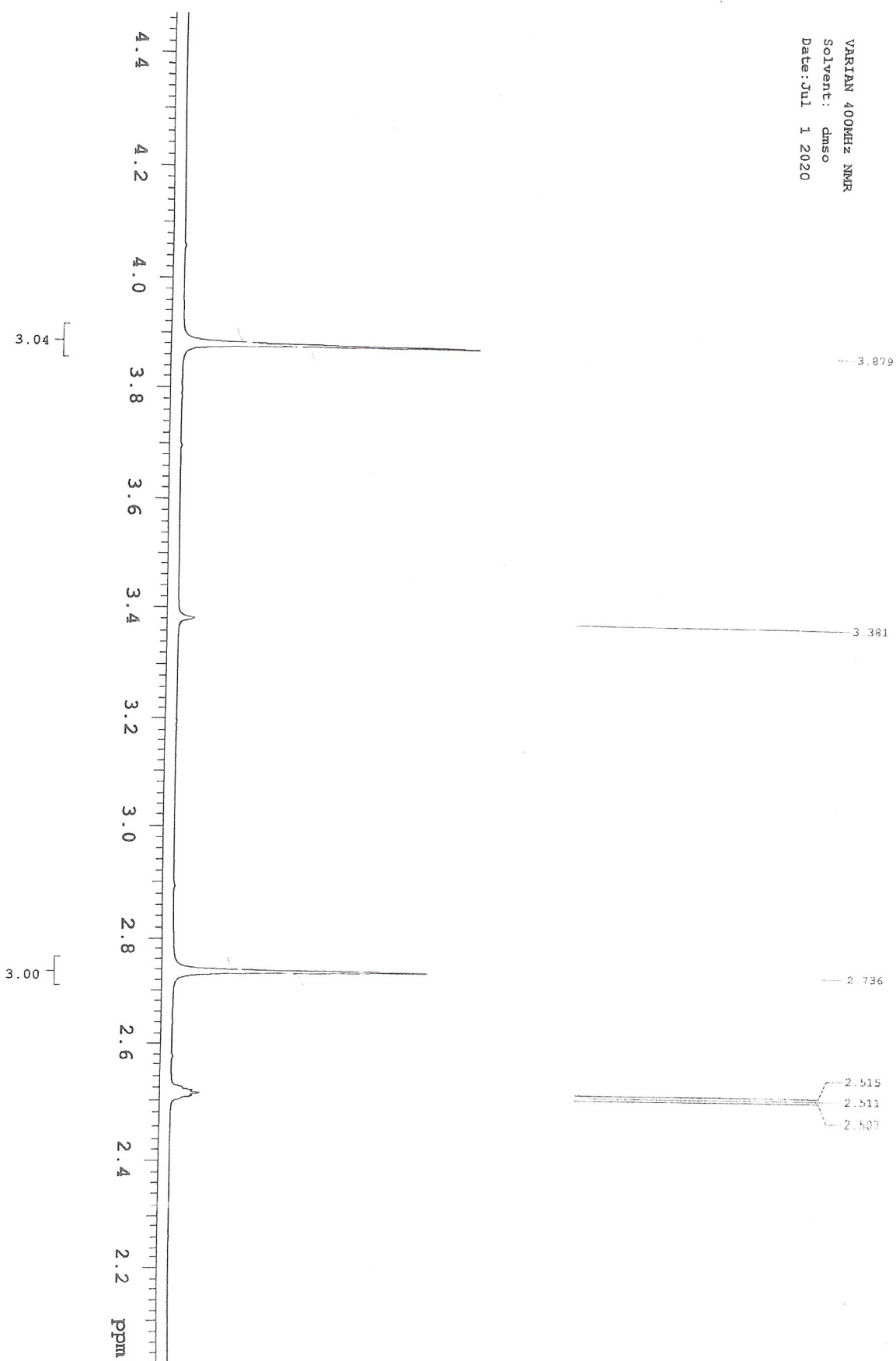


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Lot No.: 2007440

VARIAN 400MHz NMR
Solvent: dmsc
Date: Jul 1 2020



Plotname: HORMINE_PROTON_01_plot04