



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

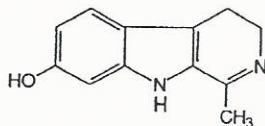
website: www.indofinechemical.com

e-mail: chemical@indofinechemical.com

CERTIFICATE OF ANALYSIS

Cat. No.: H-003

<u>Product:</u>	HARMALOL
<u>CAS Number:</u>	[525-57-5]
<u>Lot No.:</u>	1012089
<u>Source:</u>	Peganum harmala seeds
<u>Molecular Formula:</u>	C ₁₂ H ₁₂ N ₂ O
<u>Molecular Weight:</u>	200.23
<u>Melting Point:</u>	>270°C
<u>Appearance:</u>	Yellow powder
<u>Solubility:</u>	Gives a clear solution in DMSO
<u>TLC:</u>	Chloroform:Methanol (8:2) Iodine active
<u>Moisture (KF):</u>	0.39%
<u>Purity (HPLC):</u>	99.92%





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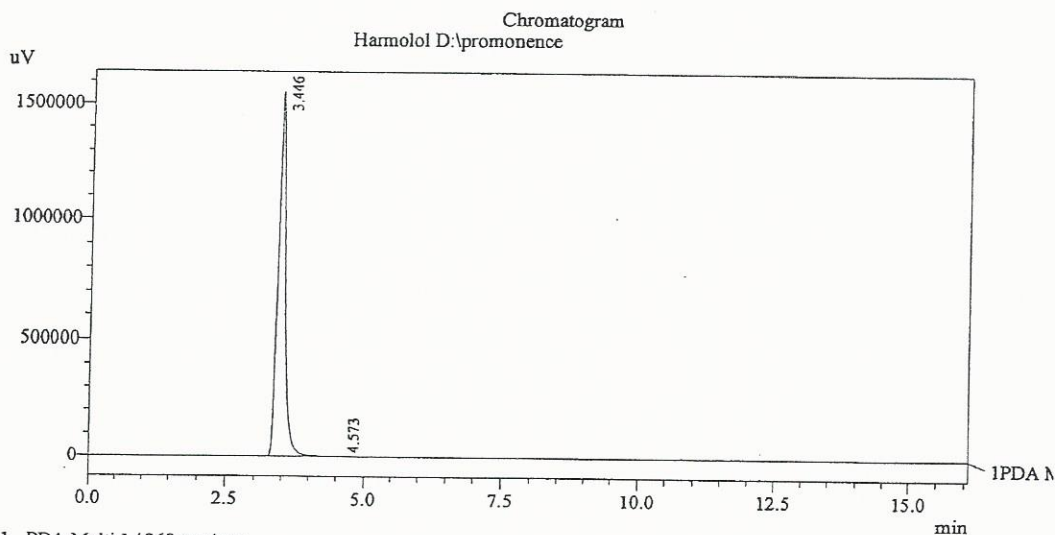
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HPLC ANALYSIS

Acquired by : Madhuri
Sample Name : Harmolol
Sample ID :
Injection Volume : 20 uL
Data Filename : 091010E.lcd
Method Filename : Linear Isocratic.M.lcm

Cat. No.: H-003
Product name: Harmalol
Lot No.: 1012089

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



1 PDA Multi 1 / 360nm 4nm

PeakTable

PDA Ch1 360nm 4nm

Peak#	Ret. Time	Area	Height	Area %
1	3.446	14311887	1551405	99.920
2	4.573	11424	1268	0.080
Total		14323311	1552672	100.000



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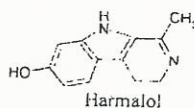
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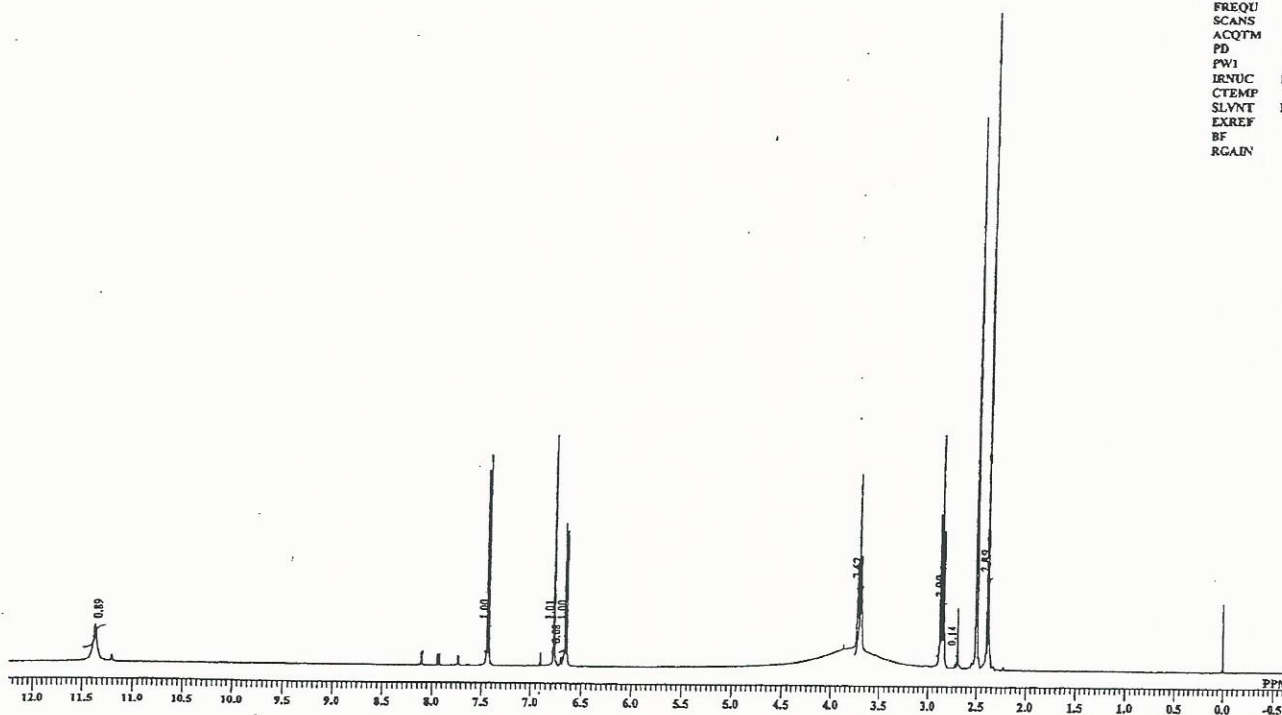
e-mail: chemical@indofinechemical.com

Cat. No.: H-003
Product name: Harmalol
Lot No.: 1012089

SR/1 1H NMR DMSO-D6



OBNUC	1H
EXMOD	NON
OBFRQ	399.65 MHz
OBSET	124.00 KHz
OBFDN	10500.00 Hz
PODPT	65534
FREQU	7992.01 Hz
SCANS	8
ACQTM	8.2002 sec
PD	3.0000 sec
PW1	5.60 msec
IRNUC	1H
CTEMP	22.9 c
SLVNT	DMSO
EXREF	0.00 ppm
BF	6.30 Hz
RGAIN	17





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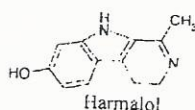
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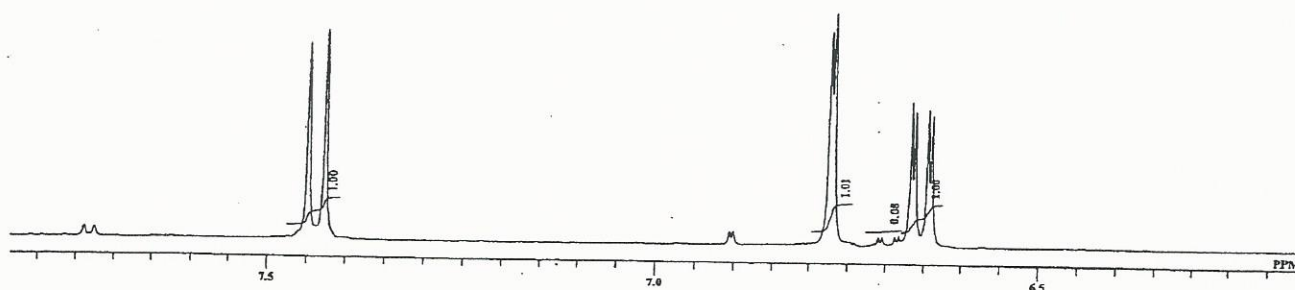
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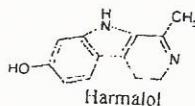
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