



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.: 06-030

Product:

TETRAHYDROPALMATINE

(5,8,13,13a-Tetrahydro-2,3,9,10-tetramethoxy-6H-dibenzo[a,g]quinolizine))

CAS Number:

[2934-97-6]

Lot Number:

0406231

Chemical Formula:

$C_{21}H_{25}NO_4$

Molecular Weight:

355.43

Melting Point:

149-151°C

Appearance:

Dark cream colored powder

Solubility:

Soluble in chloroform

TLC:

Hexane:Ethyl acetate (7:3)

NMR Spectrum:

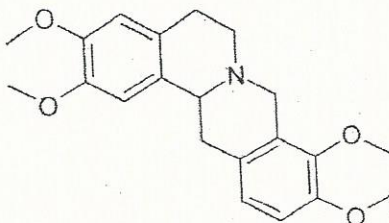
Enclosed

Storage:

Cool dry place

Purity(HPLC):

98.61%





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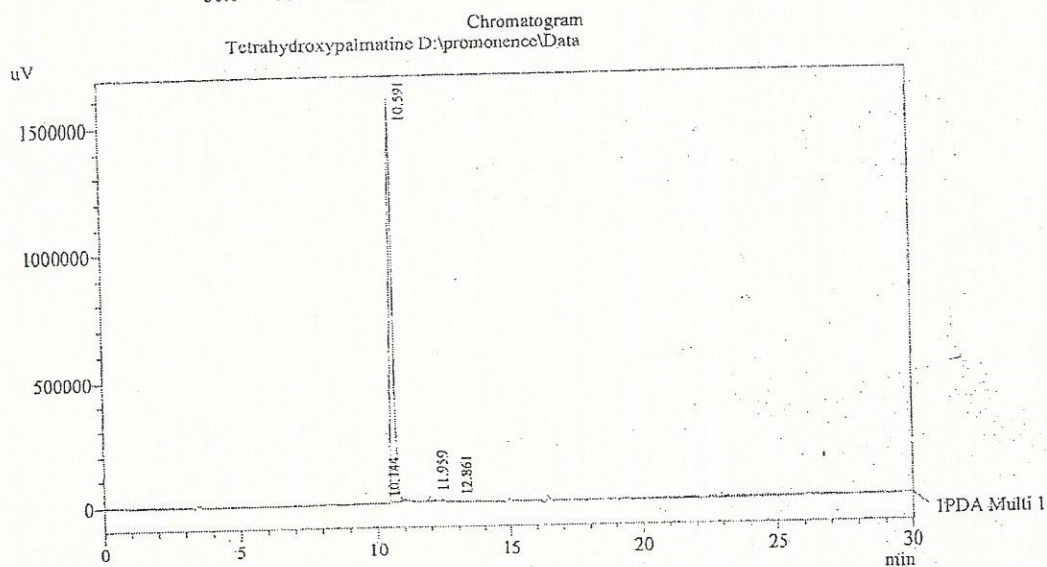
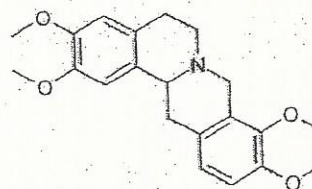
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HPLC ANALYSIS

Sample ID : Lot No:-0406231
Injection Volume : 20 µL
Data Filename : 010612A.lcd
Method Filename : Linear Gradient.M1cm

Column : LUNA C-18(2), (250mm x4.6mm 5.0µ)
Flow : 1.000 mL/min.
Mobile Phase : A(0.05% TFA in water) B(Acetonitrile)
0.01 90 10
12.0 10 90
20.0 10 90
23.0 90 10
30.0 90 10

Catalog no.: 06-030
Product name: Tetrahydropalmatine
Lot No.: 0406231



1 IPDA Multi 1 / 230nm 4nm

PeakTable

PDA Ch1 230nm 4nm					
Peak#	Name	Ret. Time	Area	Area %	Relative Retention Time
1	RT:10.144	10.144	18940	0.14	0.96
2	RT:10.591	10.591	13737754	98.61	1.00
3	RT:11.959	11.959	148876	1.07	1.13
4	RT:12.861	12.861	26068	0.19	1.21
Total			13931639	100.00	



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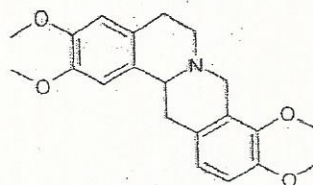
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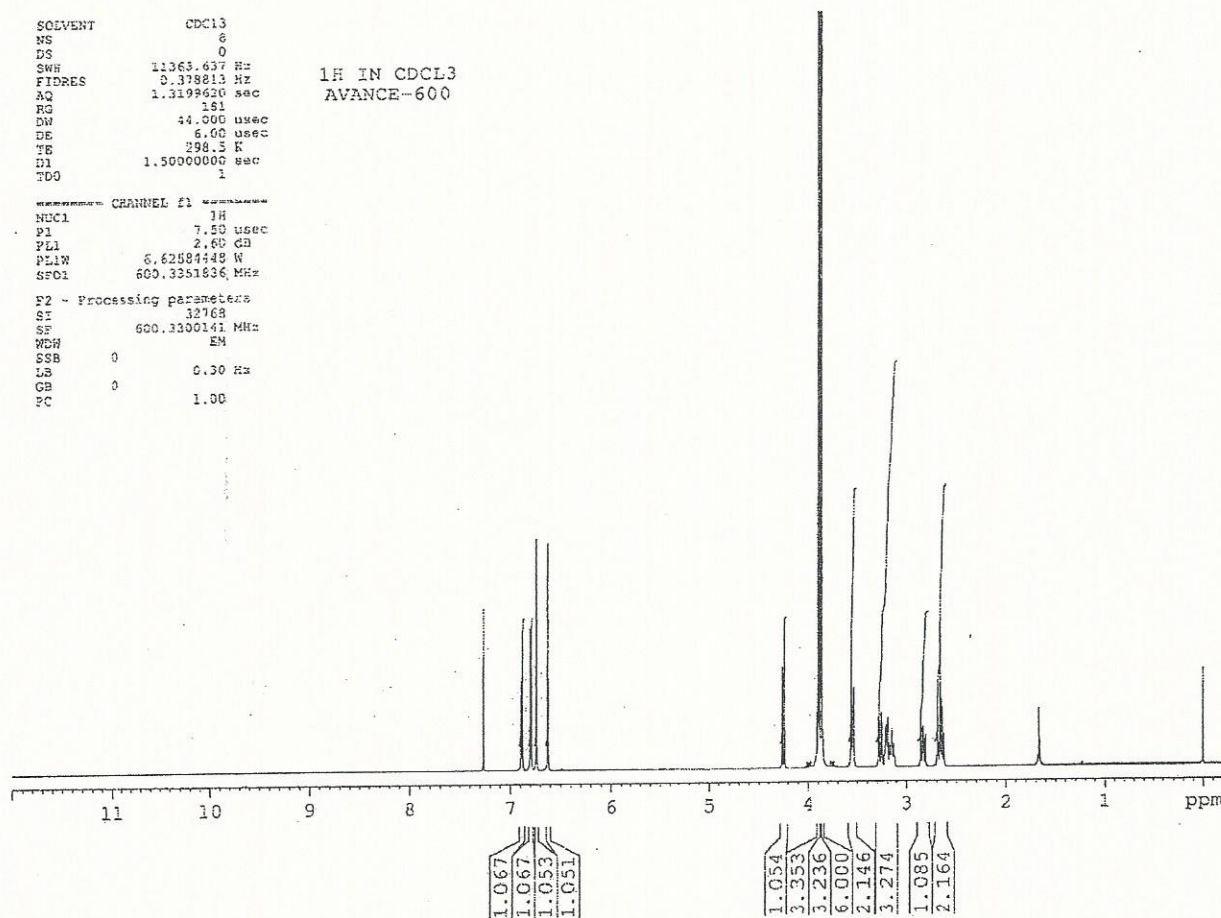


SOLVENT CDCl₃
NS 6
DS 0
SWH 11363.637 Hz
FIDRES 0.378813 Hz
AQ 1.3199620 sec
RG 1.51
DN 44.000 usec
DE 6.00 usec
TE 298.3 K
D1 1.5000000 sec
TD0 1

1H IN CDCl₃
AVANCE-600

===== CHANNEL f1 =====
NUC1 1H
P1 7.50 usec
PL1 2.60 dB
PL1W 6.62581448 W
SFO1 600.3351636 MHz

F2 - Processing parameters
SI 32768
SF 600.3300141 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00





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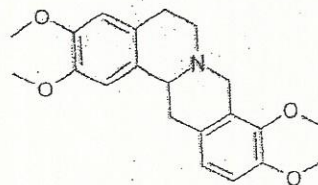
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SOVENT CDC13
NS 8
DS 0
SWH 11363.637 Hz
FIDRES 0.378513 Hz
AQ 1.1199620 sec
RG 181
RG 44.860 usec
DW 6.60 usec
DE 798.5 K
TE 1.55000000 sec
TD 1

1H IN CDCL3
AVANCE-600

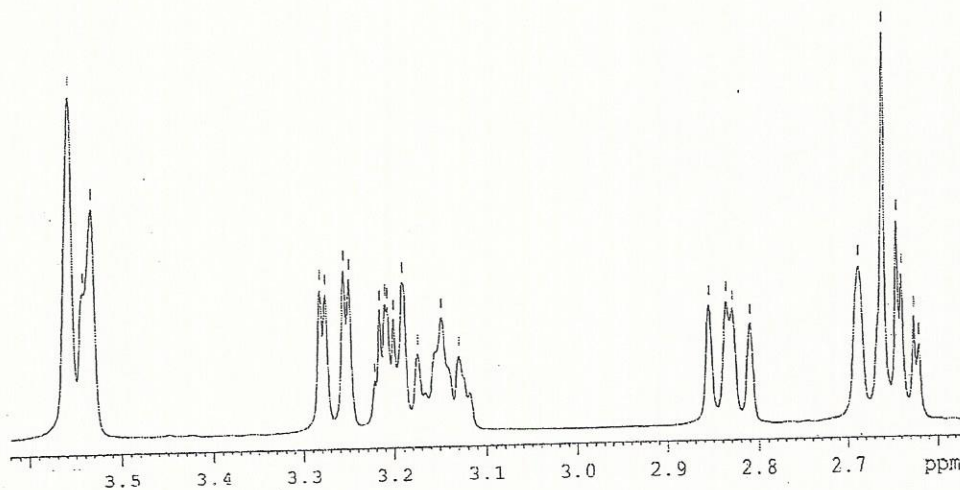
CHANNEL f1
NUC1 1H
P1 7.50 usec
PL1 2.60 dB
PL1W 6.62584448 W
RFOL 500.3351836 MHz
ST 32768
SF 600.3300141 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

3.558
3.542
3.532

3.282
3.276
3.255
3.249
3.222
3.216
3.210
3.207
3.201
3.191
3.174
3.148
3.129

2.855
2.836
2.829
2.810

2.688
2.651
2.645
2.639
2.626





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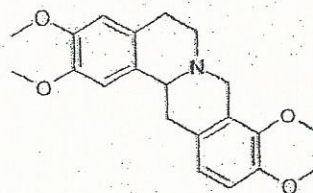
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SOLVENT CDCL3
NS 0
DS 0
SWH 11363.637 Hz
FIDRES 0.378013 Hz
AQ 1.3199620 sec
RG 261
DM 46.000 usec
DE 6.00 usec
TE 298.5 K
D1 1.50000000 sec
TDO 1

1H IN CDCL3
AVANCE-600

===== CHANNEL f1 =====
NUC1 1H
P1 7.50 usec
PL1 2.60 dB
PLIN 6.62564448 W
SFO1 600.3351836 MHz
SI 32766
SF 600.3300141 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

