



# 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

Catalog Number: 06-1300

Product Name: **UNCARINE E**  
(Isopteropodine)

CAS Number: [5171-37-9]

Lot Number: 1702762

Chemical Formula: C<sub>21</sub>H<sub>24</sub>N<sub>2</sub>O<sub>4</sub>

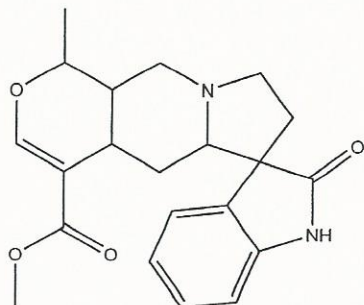
Molecular Weight: 368.43

Appearance: Off-white powder

Loss on Drying: 1.02%

Storage: Store at 2-8°C

Purity(HPLC): 98.38%





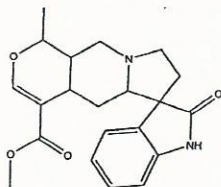
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## HPLC ANALYSIS

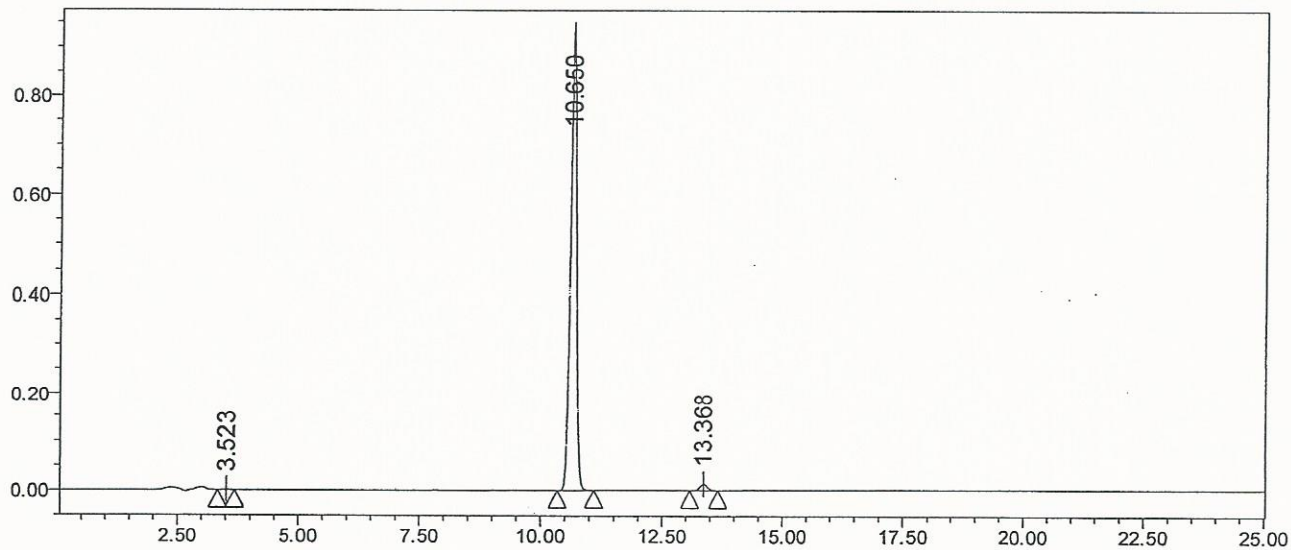
Catalog No.: 06-1300  
Product Name: Uncarine E  
(Isopteropodine)  
Lot No.: 1702762

### SAMPLE INFORMATION

Sample Type: Unknown  
Vial: 1  
Injection #: 1  
Injection Volume: 5.00 ul  
Run Time: 25.0 Minutes

Acquired By: System  
Sample Set Name:  
Processing Method: Samples  
Channel Name: 246.0nm  
Proc. Chnl. Descr.: PDA 246.0 nm

Auto-Scaled Chromatogram



Peak Results

	RT	Area	% Area	USP Plate Count	USP Resolution
1	3.523	7846	0.10	9451.44	
2	10.650	8091298	98.38	34140.77	37.10
3	13.368	125428	1.53	43976.29	11.01



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Catalog No.: 06-1300  
 Product Name: Isoproteropodine  
 (Uncarine E)  
 Lot No.: 1702762

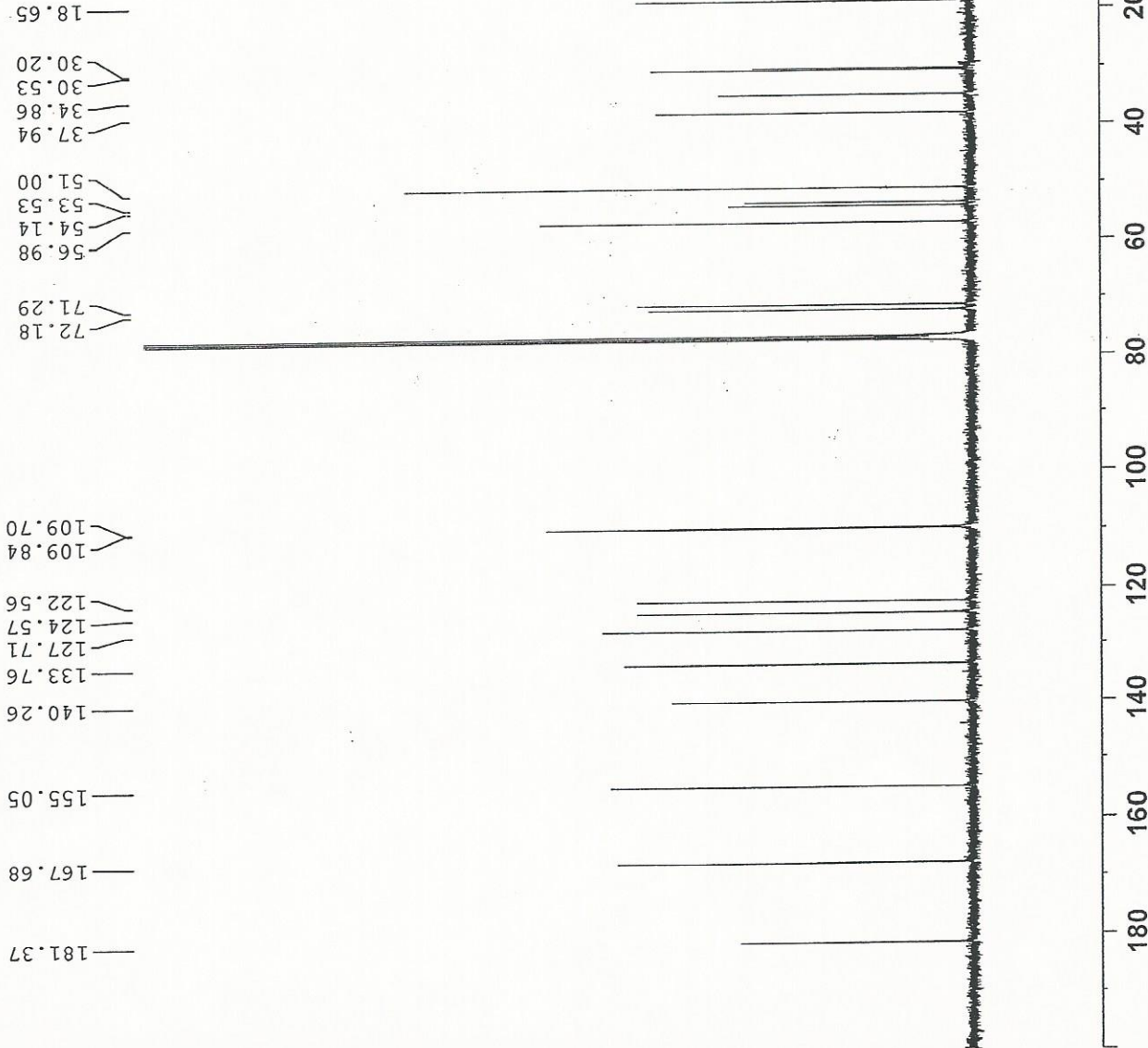
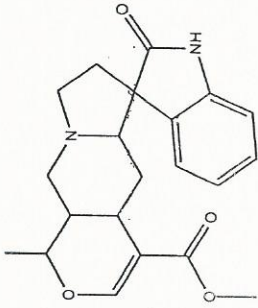


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 EXPNO 1  
 PROCNO 1

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 PULPROG zgig30  
 TD 65536  
 SOLVENT CDCl3  
 NS 6000  
 DS 4  
 SWH 24038.461 Hz  
 FIDRES 0.366798 Hz  
 AQ 1.3631488 sec  
 RG 202.5  
 DW 20.800 usec  
 DE 6.50 usec  
 TE 301.1 K  
 DL 2.0000000 sec  
 D11 0.0300000 sec  
 TD0 1

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 SF01 100.628298 MHz  
 NUC1 13C  
 P1 10.13 usec  
 PLW1 51.0000000 W  
 =====  
 CHANNEL f2 =====  
 SF02 400.1316005 MHz  
 NUC2 1H  
 CPDPRG[2] waltz16  
 PCPD2 90.00 usec  
 PLW2 11.50800037 W  
 PLW12 0.31077999 W

F2 - Processing parameters  
 SI 262144  
 SF 100.6127678 MHz  
 EM  
 WDW 0  
 SSB 0  
 LB 1.00 Hz  
 GB 0  
 PC 1.40  
 SR -1.24 Hz





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 HILLSBOROUGH, NJ 08844

Catalog No.: 06-1300  
 Product Name: Isotropropidine  
 (Uncarine E)  
 Lot No.: 1702762



Current Data Parameters  
 NAME GT 2#-13C NMR CDC13  
 EXPNO 1  
 PROCNO 1

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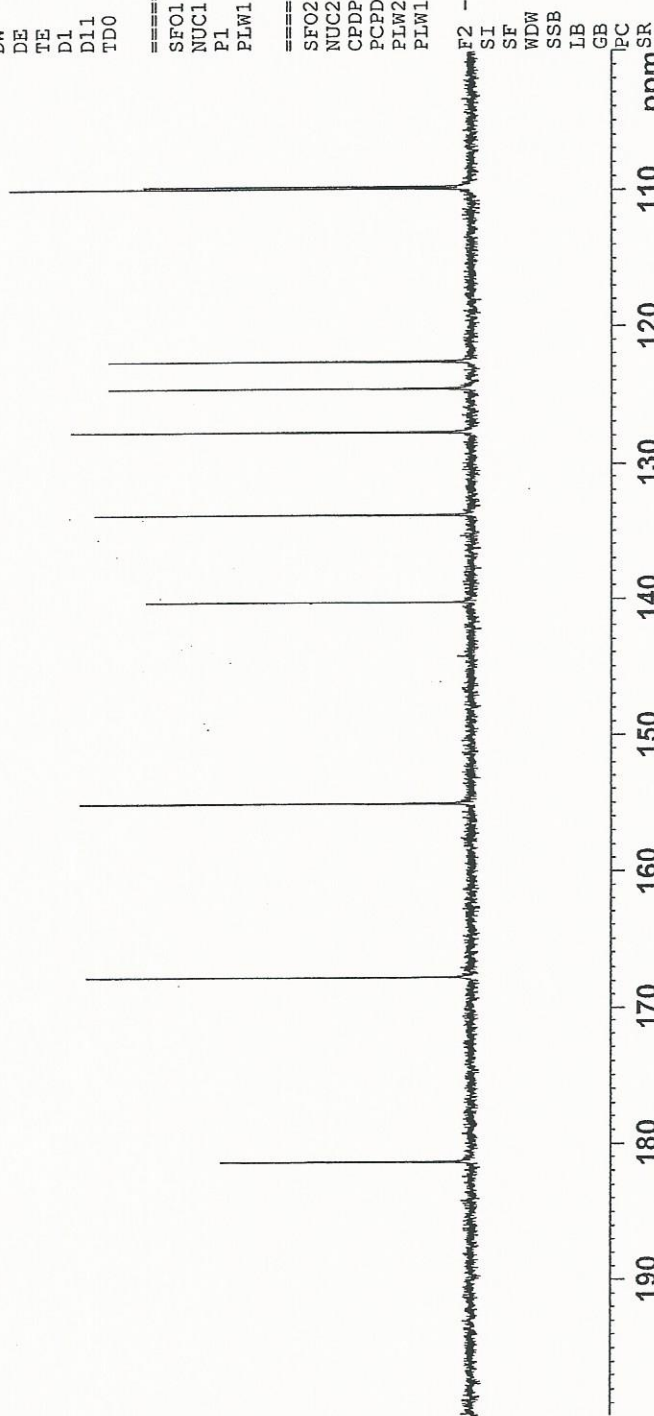
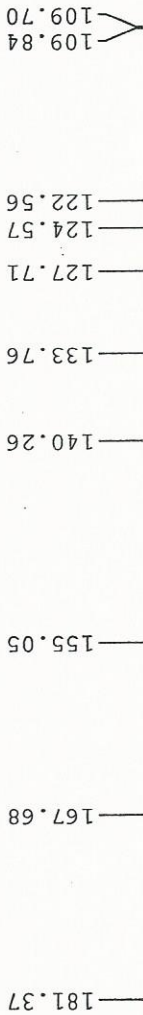
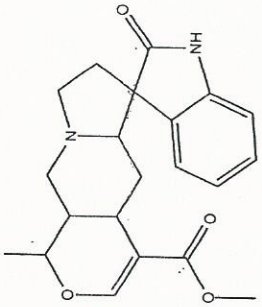
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 FIDRES 0.366798 Hz  
 AQ 1.3631488 sec  
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 DE 6.50 usec  
 TE 301.1 K  
 D1 2.00000000 sec  
 D11 0.03000000 sec  
 TDO 1

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 P1 10.13 usec  
 PLW1 51.00000000 W

==== CHANNEL f2 =====  
 SFO2 400.1316005 MHz  
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 CPDPRG12 waltz16  
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 PLW12 0.31077999 W

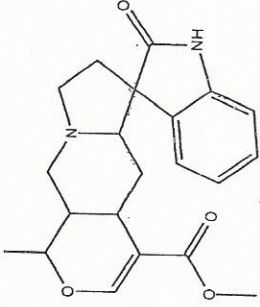
F2 - Processing parameters

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 WDW EM  
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 LB 1.00 Hz  
 GB 0  
 PC 1.40  
 SR -1.24 Hz





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Catalog No.: 06-1300  
 Product Name: Isoproteropodine  
 (Uncartine E)  
 Lot No.: 1702762



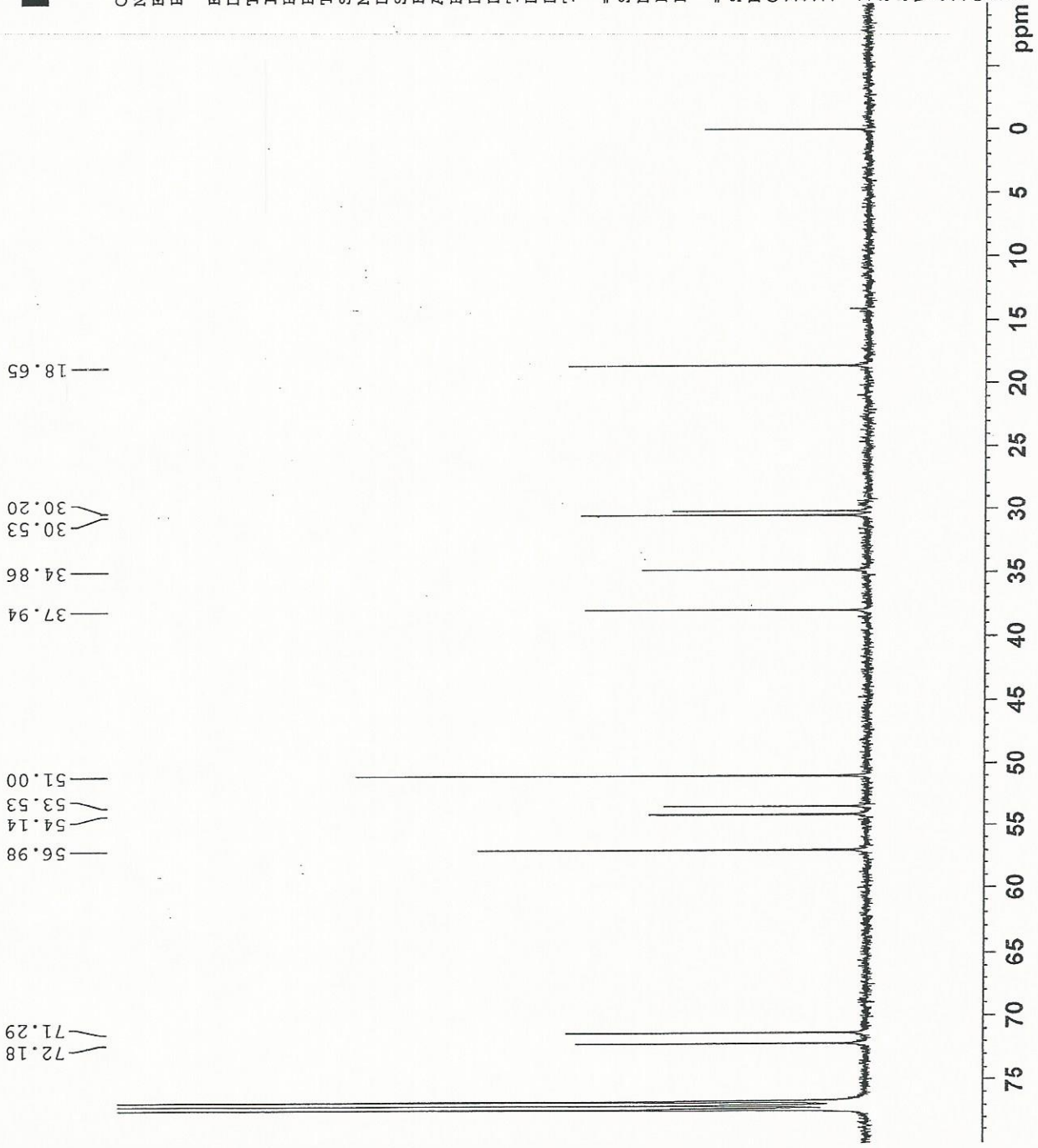
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 PROBHD 5 mm PABEO BB/  
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 TD 65536  
 SOLVENT CDCl3  
 NS 6000  
 DS 4  
 SWH 24038.461 Hz  
 FIDRES 0.366798 Hz  
 AQ 1.3631488 sec  
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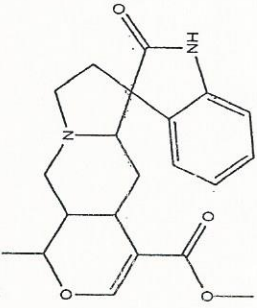
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 NUC1 13C  
 P1 10.13 usec  
 PLW1 51.00000000 W

==== CHANNEL f2 =====  
 SFO2 400.1316005 MHz  
 NUC2 1H  
 CPDPRG[2] waltz16  
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 PLW2 11.50800037 W  
 PLW12 0.31077999 W

F2 - Processing parameters  
 SI 262144  
 SF 100.6127678 MHz  
 WDW EM  
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 LB 1.00 Hz  
 GB 0  
 PC 1.40  
 SR -1.24 Hz



Catalog No.: 06-1300  
 Product Name: Isoteropodine  
 (Uncarine E)  
 Lot No.: 1702762



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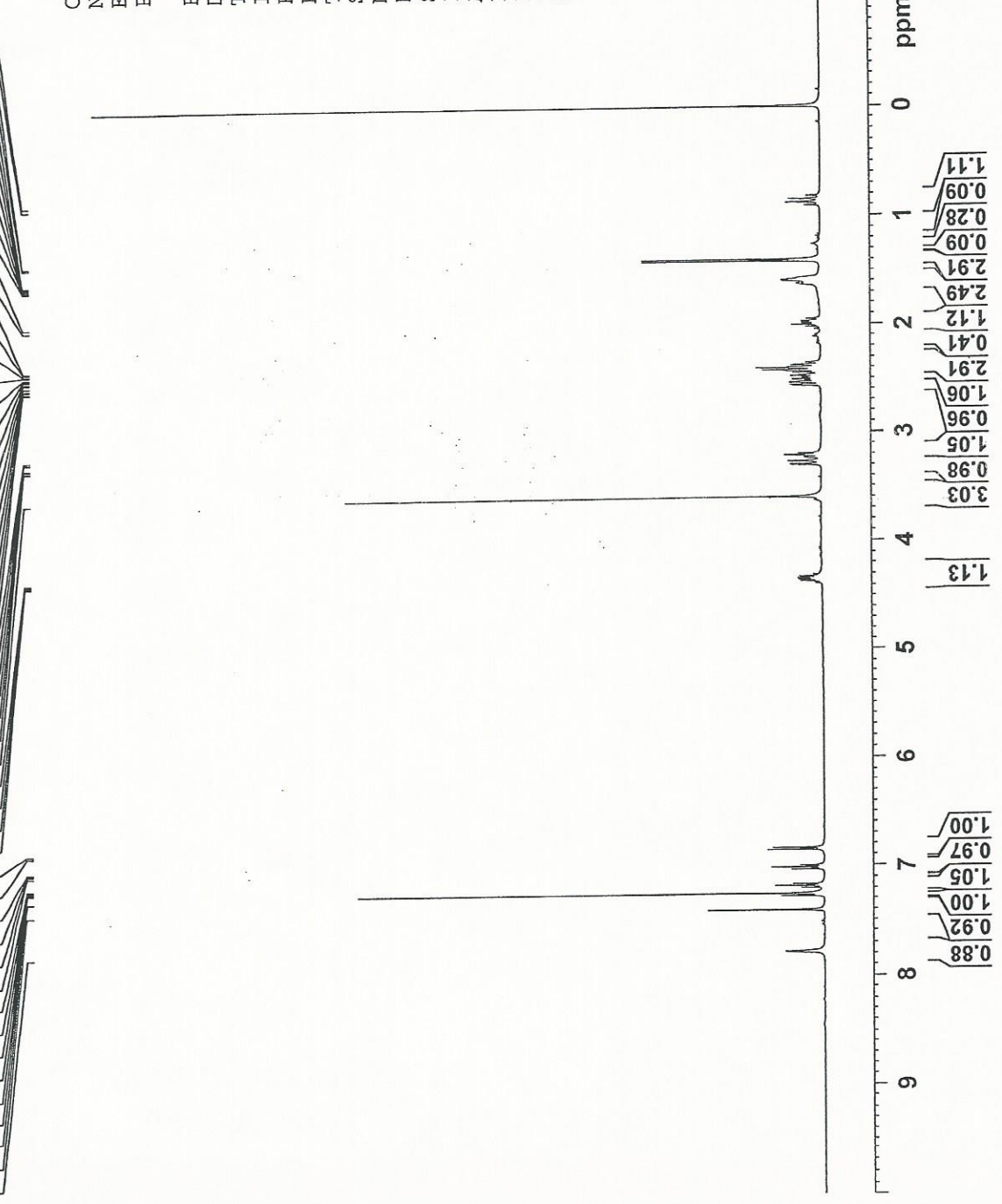
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7.021  
7.004  
7.002  
6.863  
6.843  
4.364  
4.348  
4.338  
4.322  
3.603  
3.301  
3.297  
3.272  
3.268  
3.214  
3.196  
2.572  
2.565  
2.543  
2.536  
2.512  
2.482  
2.472  
2.451  
2.436  
2.429  
2.407  
2.398  
2.380  
2.374  
2.004  
1.972  
1.633  
1.625  
1.615  
1.601  
1.593  
1.584  
1.575  
1.418  
1.403  
0.879  
0.847

Current Data Parameters  
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 PROCNO 1

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 PULPROG zg30  
 TD 65536  
 SOLVENT CDCl3  
 NS 16  
 DS 2  
 SWH 8012.820 Hz  
 FIDRES 0.122266 Hz  
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 RG 202.5  
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 DE 6.50 usec  
 TE 301.1 K  
 D1 2.00000000 sec  
 TDO 1

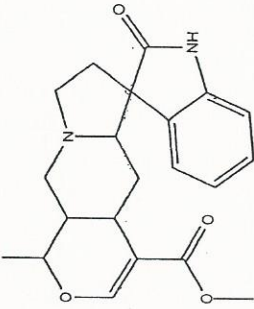
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 PLW1 11.50800037 W

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 SF 400.1300094 MHz  
 EM  
 WDW 0  
 SSB 0  
 LB 0.30 Hz  
 GB 1.00  
 PC 9.40 Hz  
 SR





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Catalog No.: 06-1300  
 Product Name: Isoproteropodine  
 (Uncarine E)  
 Lot No.: 1702762

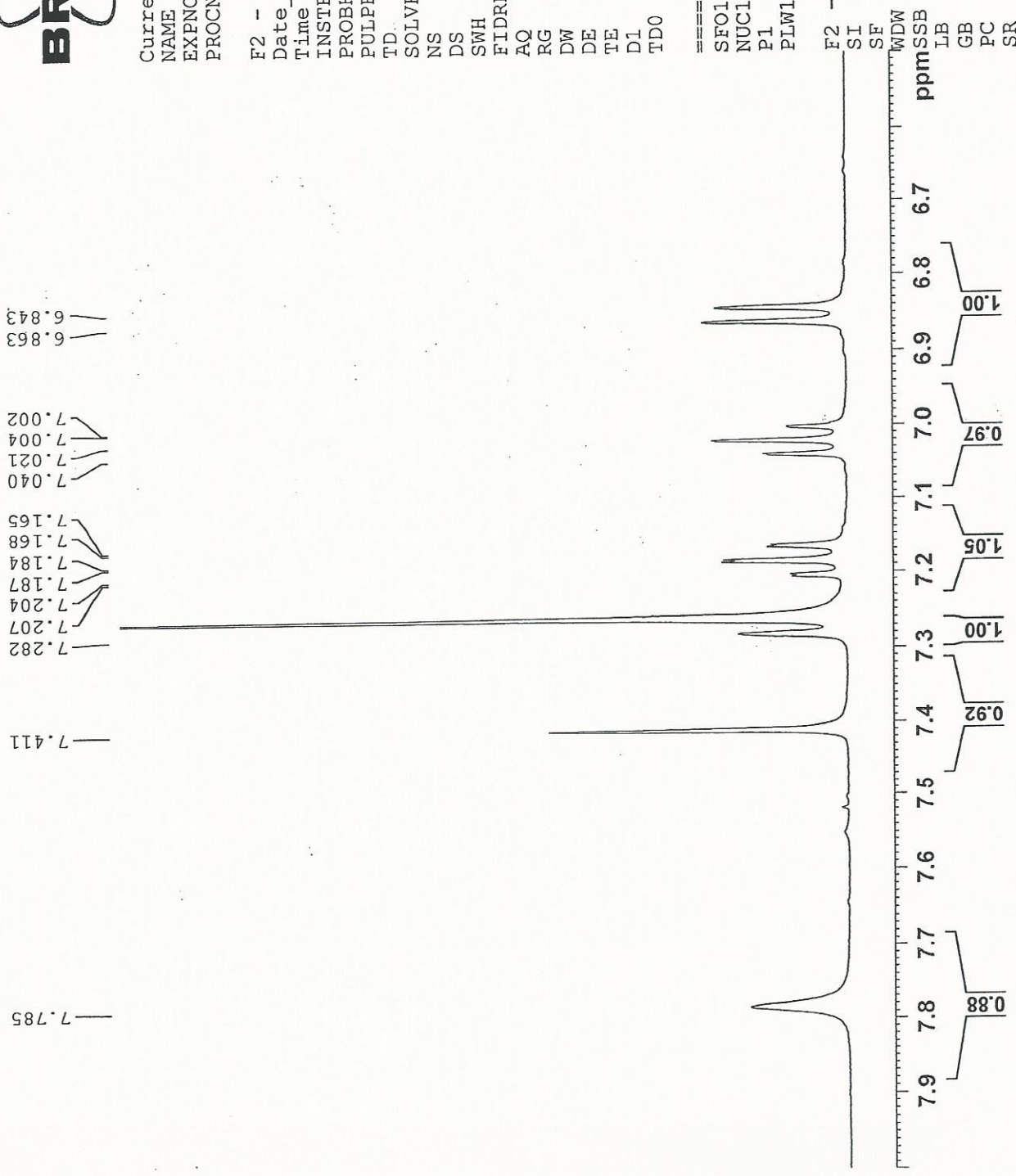


Current Data Parameters  
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 EXPNO 1  
 PROCNO 1

F2 - Acquisition Parameters  
 Date\_ 20161118  
 Time\_ 18.02  
 INSTRUM spect  
 PROBHD 5 mm PABBO BB/  
 PULPROG zg30  
 TD 65536  
 SOLVENT CDCl3  
 NS 16  
 DS 2  
 SWH 8012.820 Hz  
 FIDRES 0.122266 Hz  
 AQ 4.0894465 sec  
 RG 202.5  
 DW 62.400 usec  
 DE 6.50 usec  
 TE 301.1 K  
 D1 2.00000000 sec  
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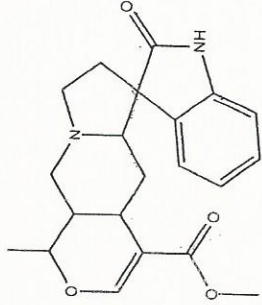
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 LB 0.30 Hz  
 GB 1.00  
 PC 9.40 Hz  
 SR





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Catalog No.: 06-1300  
 Product Name: Isoproteropidine  
 (Uncarine E)  
 Lot No.: 1702762



4.379  
4.364  
4.348  
4.338  
4.322  
4.307

3.301  
3.297  
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3.235  
3.214  
3.196

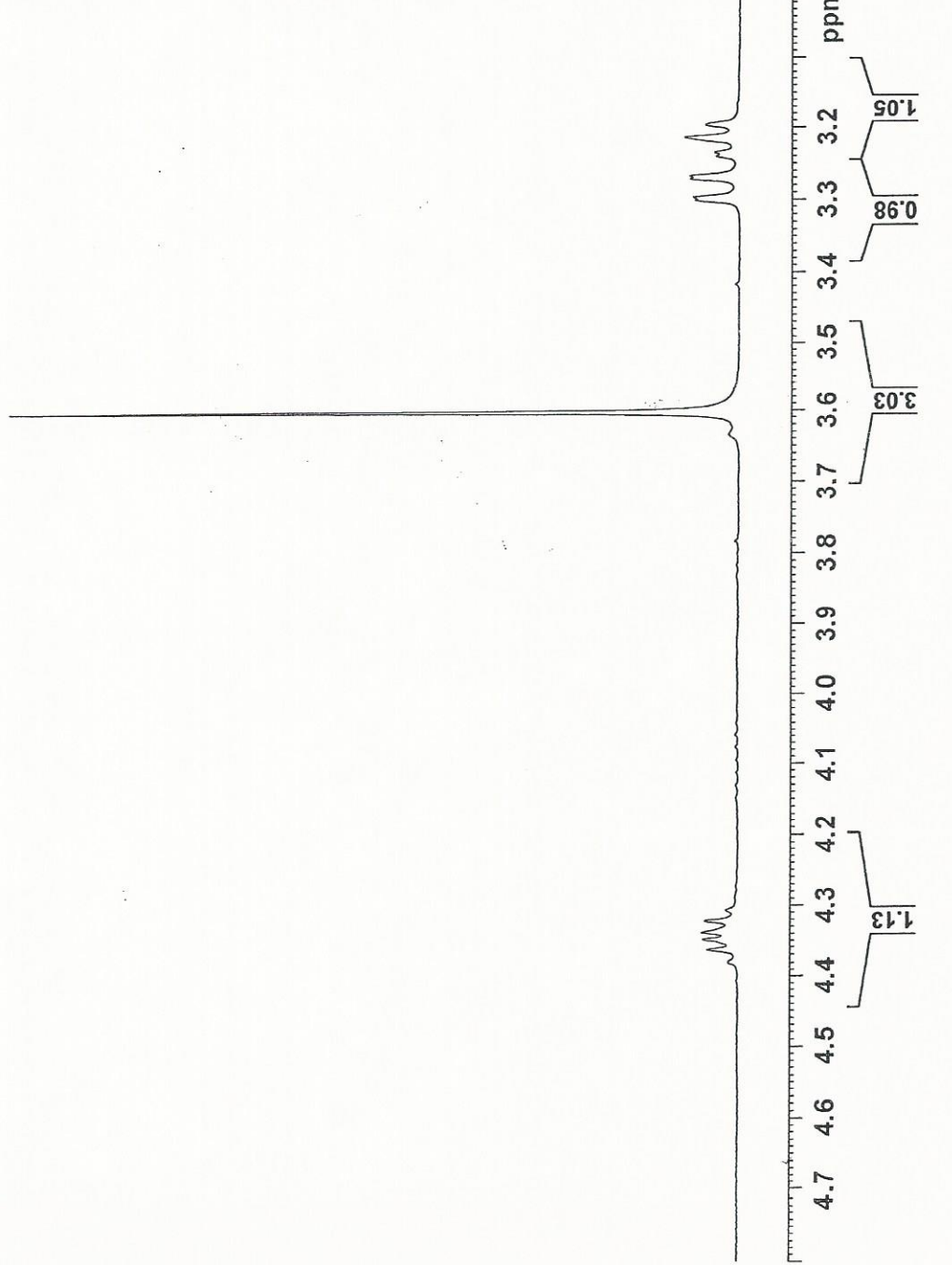


Current Data Parameters  
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 EXPNO 1  
 PROCNO 1

F2 - Acquisition Parameters  
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 Time\_ 18.02  
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 PULPROG zg30  
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 SOLVENT CDC13  
 NS 16  
 DS 2  
 SWH 8012.820 Hz  
 FIDRES 0.122266 Hz  
 AQ 4.0894465 sec  
 RG 202.5  
 DW 62.400 usec  
 DE 6.50 usec  
 TE 301.1 K  
 D1 2.00000000 sec  
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 PLW1 11.50800037 W

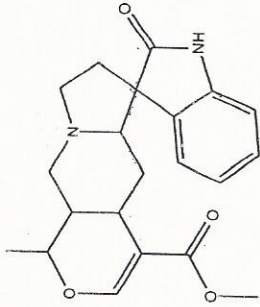
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 SR 9.40 Hz







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2.572  
2.565  
2.543  
2.536  
2.523  
2.512  
2.501  
2.494  
2.482  
2.472  
2.451  
2.436  
2.429  
2.407  
2.398  
2.380  
2.374  
2.356  
2.350

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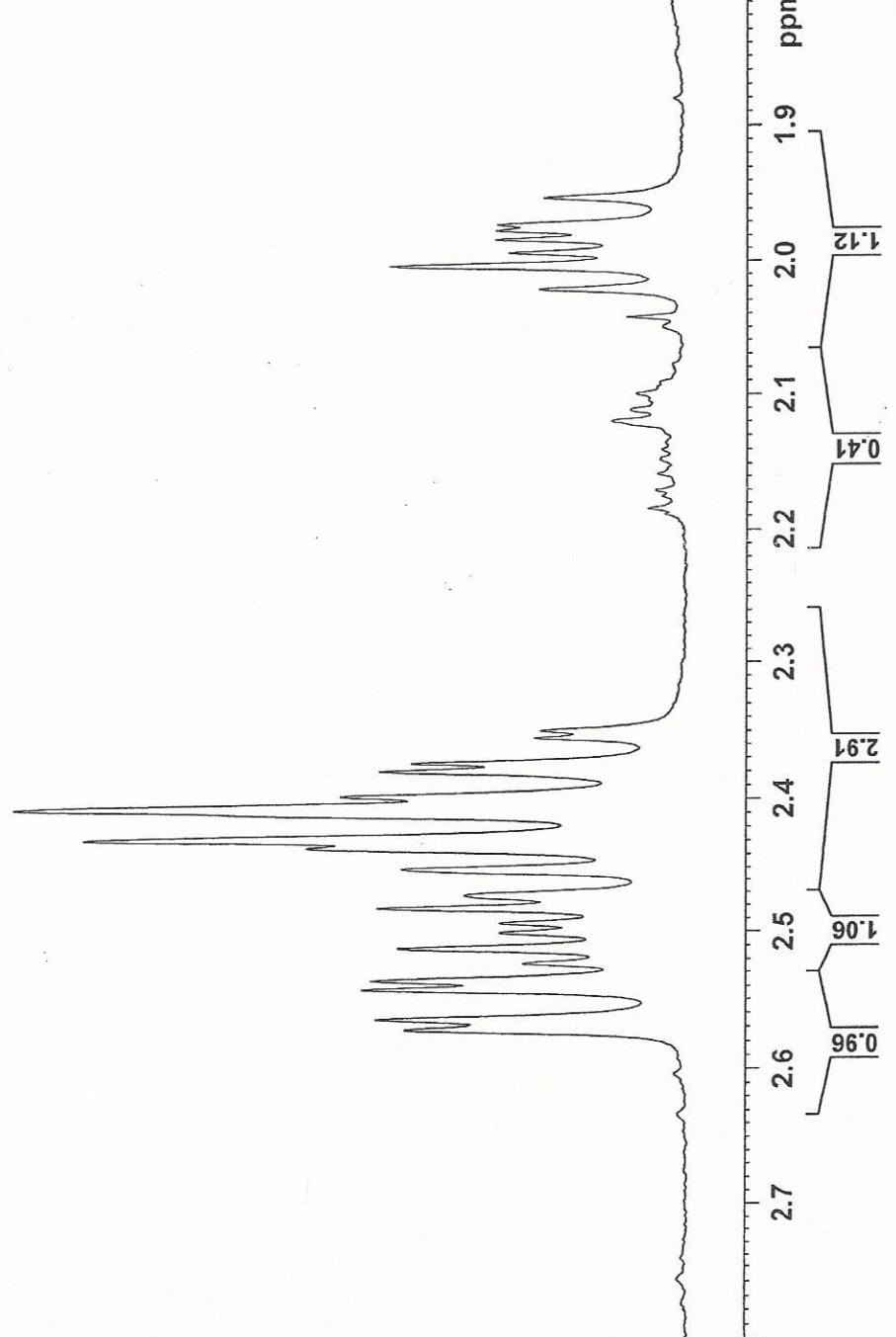
Catalog No.: 06-1300  
 Product Name: Isoproteropodine  
 (Uncarine E)  
 Lot No.: 1702762

Current Data Parameters  
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 EXPNO 1  
 PROCNO 1

F2 - Acquisition Parameters  
 Date\_ 20161118  
 Time 18.02  
 INSTRUM spect  
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 PULPROG zg30  
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 SOLVENT CDC13  
 NS 16  
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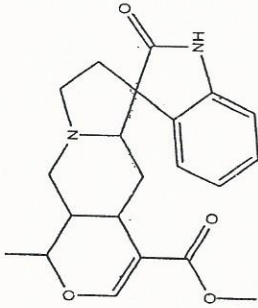
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 PC 9.40 Hz  
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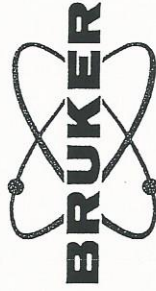
INDOFINE Chemical Company, Inc.  
 121 STRYKER LANE  
 BLDG. 30, SUITE 1  
 HILLSBOROUGH, NJ 08844



1.633  
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1.615  
1.601  
1.593  
1.584  
1.575

1.418  
1.403

0.909  
0.879  
0.847  
0.817



Catalog No.: 06-1300  
 Product Name: Isoteropodine  
 (Uncarine E)  
 Lot No.: 1702762

Current Data Parameters  
 NAME GT 2#-1H NMR CDCl3  
 EXPNO 1  
 PROCNO 1

F2 - Acquisition Parameters  
 Date\_ 20161118  
 Time 18.02  
 INSTRUM spect  
 PROBHD 5 mm PABBO BB/  
 PULPROG zg30  
 TD 65536  
 SOLVENT CDCl3  
 NS 16  
 DS 2  
 SWH 8012.820 Hz  
 FIDRES 0.122266 Hz  
 AQ 4.0894465 sec  
 RG 202.5  
 DW 62.400 usec  
 DE 6.50 usec  
 TE 301.1 K  
 D1 2.0000000 sec  
 TD0 1

==== CHANNEL f1 =====  
 SFO1 400.1324710 MHz  
 NUC1 1H  
 P1 14.79 usec  
 PLW1 11.50800037 W

F2 - Processing parameters  
 SI 65536  
 SF 400.1300094 MHz  
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 GB 0  
 PC 1.00  
 SR 9.40 Hz

