



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: 020530

Product Name: **METHOXSALEN**
(Xanthotoxin; 8-Methoxypsoralen; Ammoidin; 8-MOP)

CAS Number: [298-81-7]

Lot Number: 1906263

Chemical Formula: C₁₂H₈O₄

Molecular Weight: 216.19

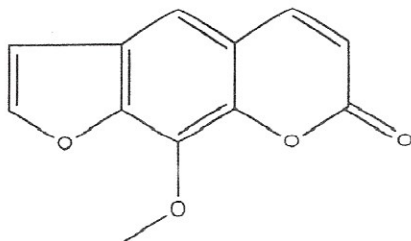
Appearance: Off-white powder

Loss on Drying: 0.12%

NMR Spectrum: Enclosed (Confirms to the structure)

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

Purity (HPLC): 99.84%



Prepared by:
Ramesh Mandadi
Ramesh Mandadi
Director of Operations

Reviewed and approved by:
Sujata Moton
S. Moton
VP



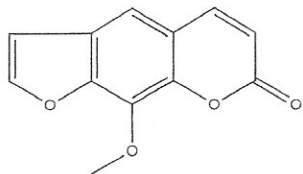
INDOFINE Chemical Company, Inc.

121 Stryker Lane, Bldg. 30

Hillsborough, NJ 08844 USA

Phone: (908) 359-6778; Fax: (908) 359-1179

HPLC ANALYSIS



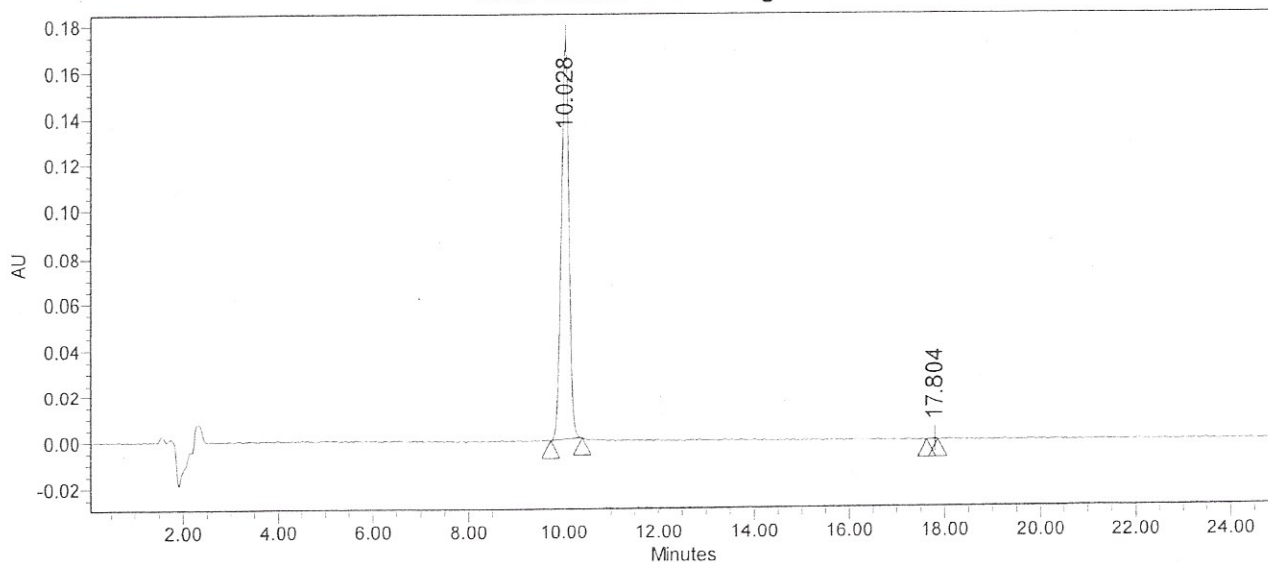
Catalog No.: 020530
Product Name: Methoxsalen
Lot No.: 1906263

SAMPLE INFORMATION

Sample Name: Xanthotoxin
Sample Type: Unknown
Vial: 47
Injection #: 1
Injection Volume: 10.00 ul
Run Time: 25.0 Minutes

Acquired By: cxy01
Sample Set Name:
Acq. Method Set: Xanthotoxin
Processing Method: Samples
Channel Name: 297.0nm
Proc. Chnl. Descr.: PDA 297.0 nm

Auto-Scaled Chromatogram



Peak Results

Name	RT	Area	% Area	USP Plate Count	USP Resolution
1	10.028	1971505	99.84	17809.17	
2	17.804	3153	0.16	348418.66	36.41

Prepared by:

Ramesh Mandadi

Ramesh Mandadi

Director of Operations

Reviewed and Approved by:

Sujata Moton

Sujata Moton

VP



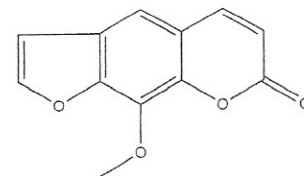
INDOFINE Chemical Company, Inc.

121 Stryker Lane, Bldg. 30, Suite 1 • Hillsborough, NJ 08844 • U.S.A.

Phone: (908) 359-6778 • FAX: (908) 359-1179

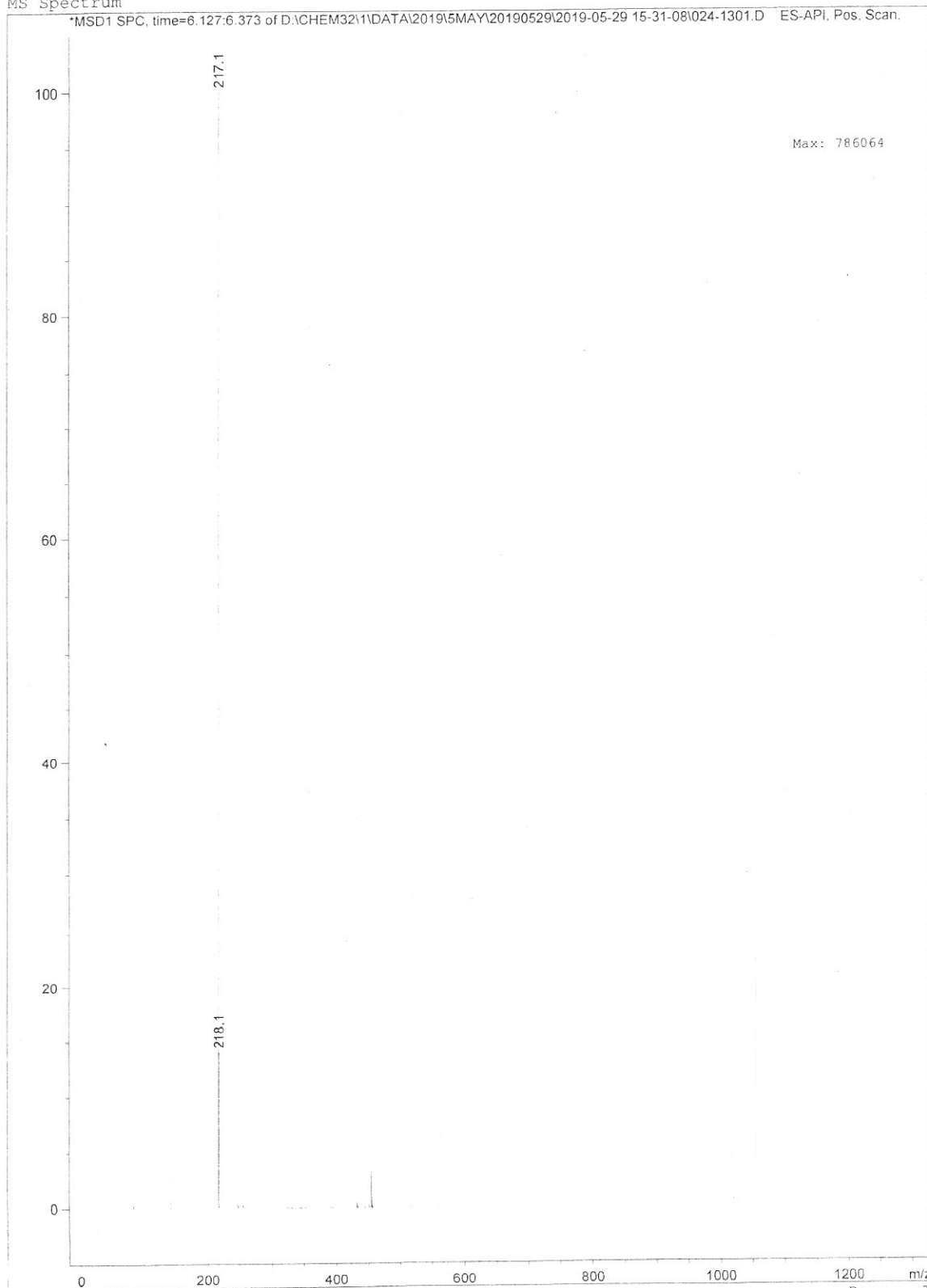
website: www.indofinechemical.com

e-mail: chemical@indofinechemical.com



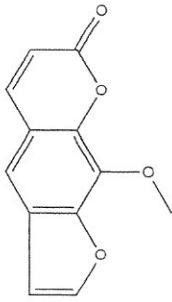
Catalog No.: 020530
Product Name: Methoxsalen
Lot No.: 1906263

MS Spectrum



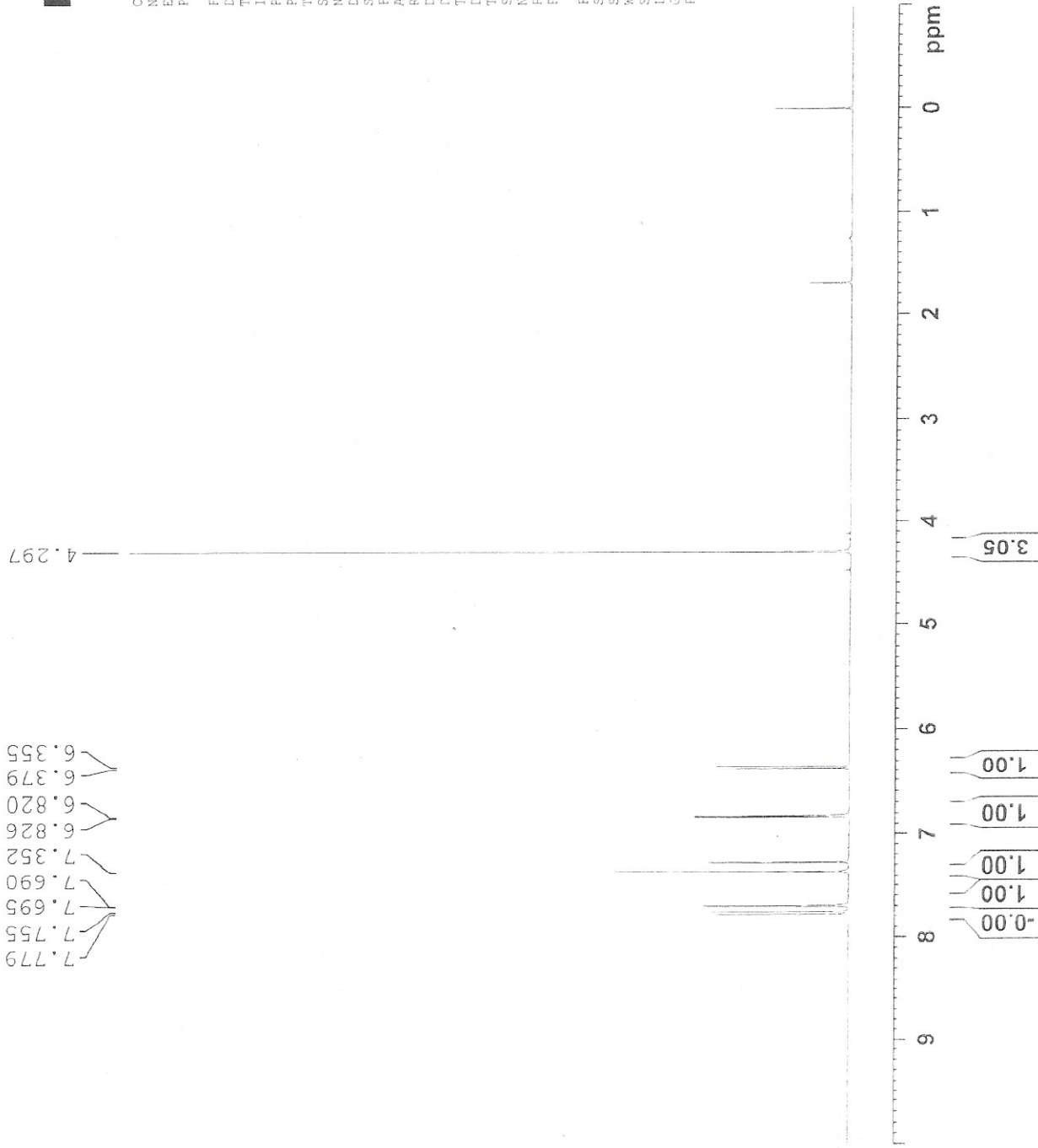


INDOFINE Chemical Company, Inc.
 121 STRYKER LANE
 BLDG. 30, SUITE 1
 HILLSBOROUGH, NJ 08844



Catalog No.: 020530
 Product Name: Methoxsalen
 Lot No.: 1906263

7.779
7.755
7.695
7.690
7.352
6.826
6.820
6.379
6.355



Current Data Parameters
 NAME May29-2019-10040422-1H NMR CDC13
 EXPNO 1
 PROCNO 1

F2 - Acquisition Parameters

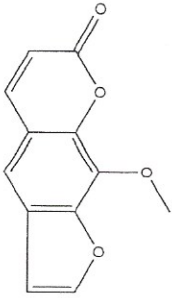
Date_ 20190529
 Time 17.15 h
 INSTRUM spect
 PROBHD zg30
 PULPROG zg30
 TD 65536
 SOLVENT CDC13
 NS 16
 DS 2
 SWH 8012.820 Hz
 FIDRES 0.244532 Hz
 AC 4.0894465 sec
 RC 146.4
 DW 62.400 usec
 DE 6.50 usec
 TE 298.5 K
 D1 1.00000000 sec
 TDO 1
 SFO1 400.1324708 MHz
 NUC1 1H
 P1 9.43 usec
 PLW1 19.00000000 W

F2 - Processing parameters

SI 65536
 SF 400.1300042 MHz
 EN
 SSR 0
 LB 0
 GB 0
 PC 1.00



INDOFINE Chemical Company, Inc.
 121 STRYKER LANE
 BLDG. 30, SUITE 1
 HILLSBOROUGH, NJ 08844



Catalog No.: 020530
 Product Name: Methoxsalen
 Lot No.: 1906263

7.779
 7.755
 7.695
 7.690

7.352

6.826
 6.820

6.379
 6.355

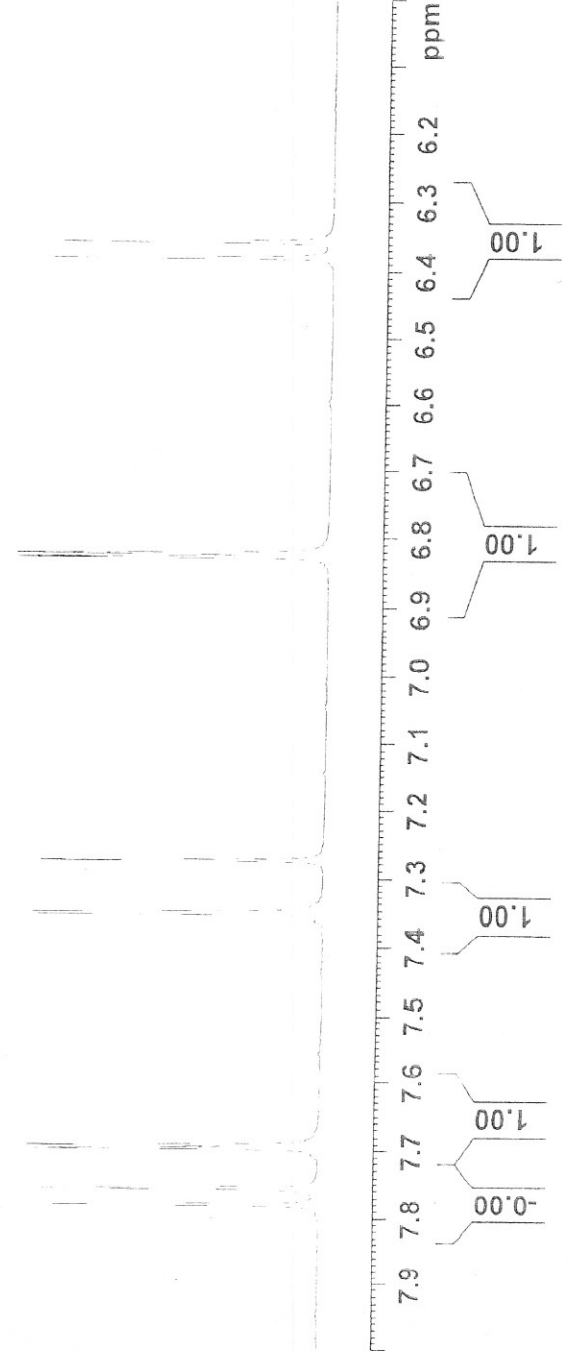


Current Data Parameters
 NAME May29-2019-10040422-1H NMR CDCL3
 EXPNO 1
 PROCNO 1

F2 - Acquisition Parameters

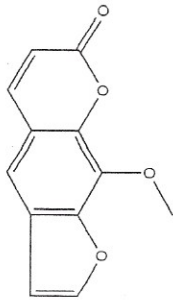
Date_ 20190529
 Time_ 17.15 h
 INSTRUM spect
 PROBRD Z116098_0697 (
 PULPROG zg30
 TD 65536
 SOLVENT CDCL3
 NS 16
 DS 2
 SFOH 8012.820 Hz
 FIDRES 0.244532 Hz
 AQ 4.0894465 sec
 RG 146.4
 DW 62.400 usec
 DE 6.50 usec
 TE 298.5 K
 D1 1.00000000 sec
 TD0 1
 SFO1 400.1324708 MHz
 NUC1 1H
 P1 9.43 usec
 PLW1 15.00000000 W

F2 - Processing Parameters
 SI 65536
 SF 400.1300042 MHz
 XNW EM
 SSB 0
 LE 0
 GR 0
 FC 1.00



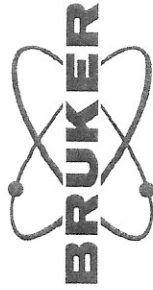
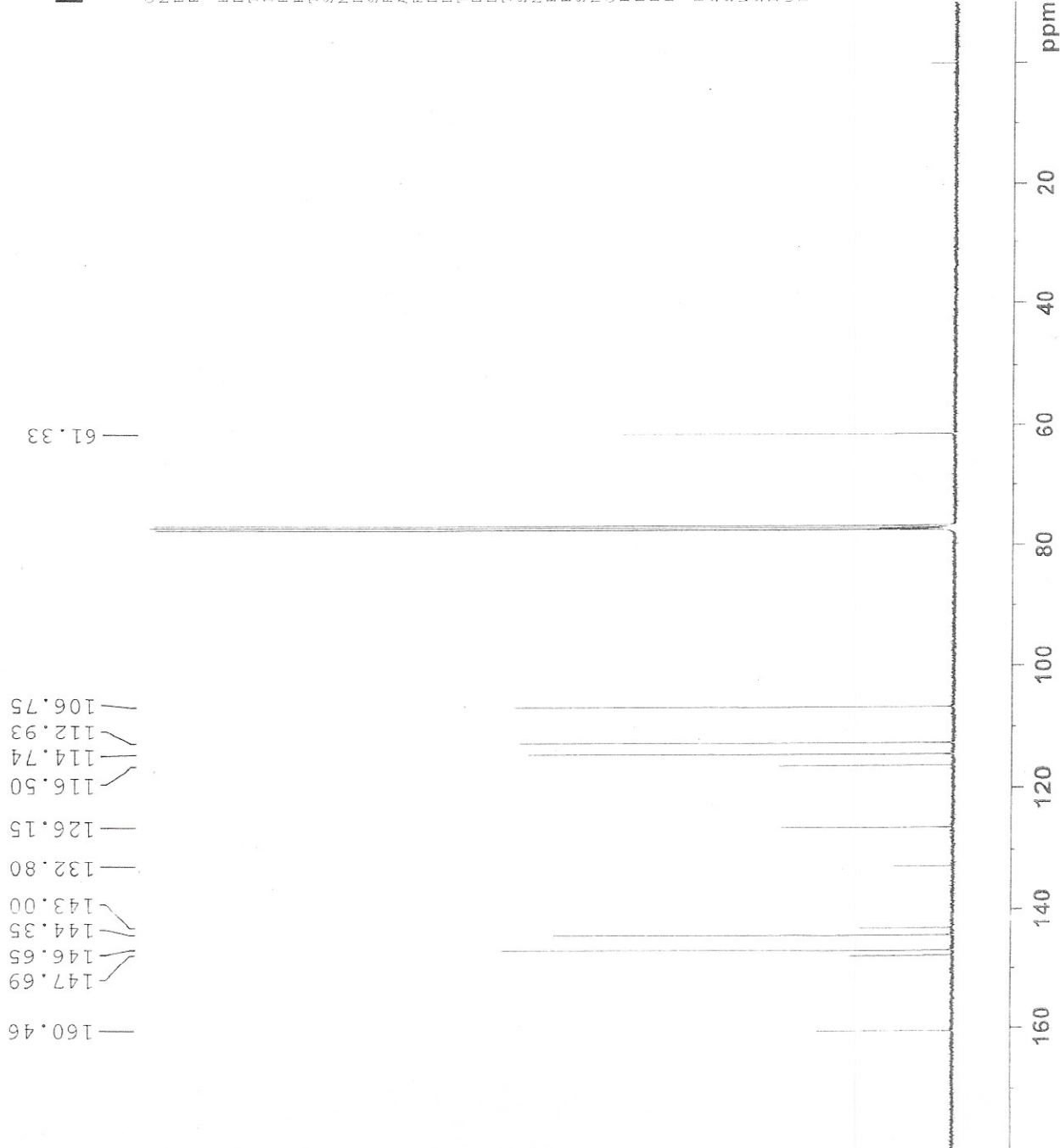


INDOFINE Chemical Company, Inc.
 121 STRYKER LANE
 BLDG. 30, SUITE 1
 HILLSBOROUGH, NJ 08844



Catalog No.: 020530
 Product Name: Methoxsalen
 Lot No.: 1906263

160.46
 147.69
 146.65
 144.35
 143.00
 132.80
 126.15
 116.50
 114.74
 112.93
 106.75



Current Data Parameters
 NAME May29-2019-10040472-13C NMR CTCLJ
 EXPNO 1
 PROCNO 1

F2 - Acquisition Parameters

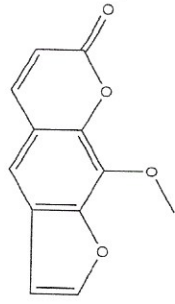
Date 20190529
 Time 18.15 h
 INSTRUM spect
 PROBHD Z116098 0697 f
 PULPROG zgpg30
 TD 65536
 SOLVENT CDCl3
 NS 1074
 DS 4
 SWH 24038.461 Hz
 FIDRES 0.733596 Hz
 AQ 1.3631888 sec
 RG 203.3
 DW 20.800 usec
 DE 6.50 usec
 TE 299.5 K
 D1 2.00000000 sec
 D11 0.03000000 sec
 TD0 1
 SFO1 100.6228298 MHz
 NUC1 13C
 P1 10.00 usec
 FLM1 81.3929977 W
 SFO2 400.1516005 MHz
 NUC2 1H
 CDEPRG12 waltz16
 PCPDT2 90.00 usec
 PLW2 19.00000000 W
 FLM2 0.20840999 W
 PLW13 0.10483000 W

F3 - Processing parameters

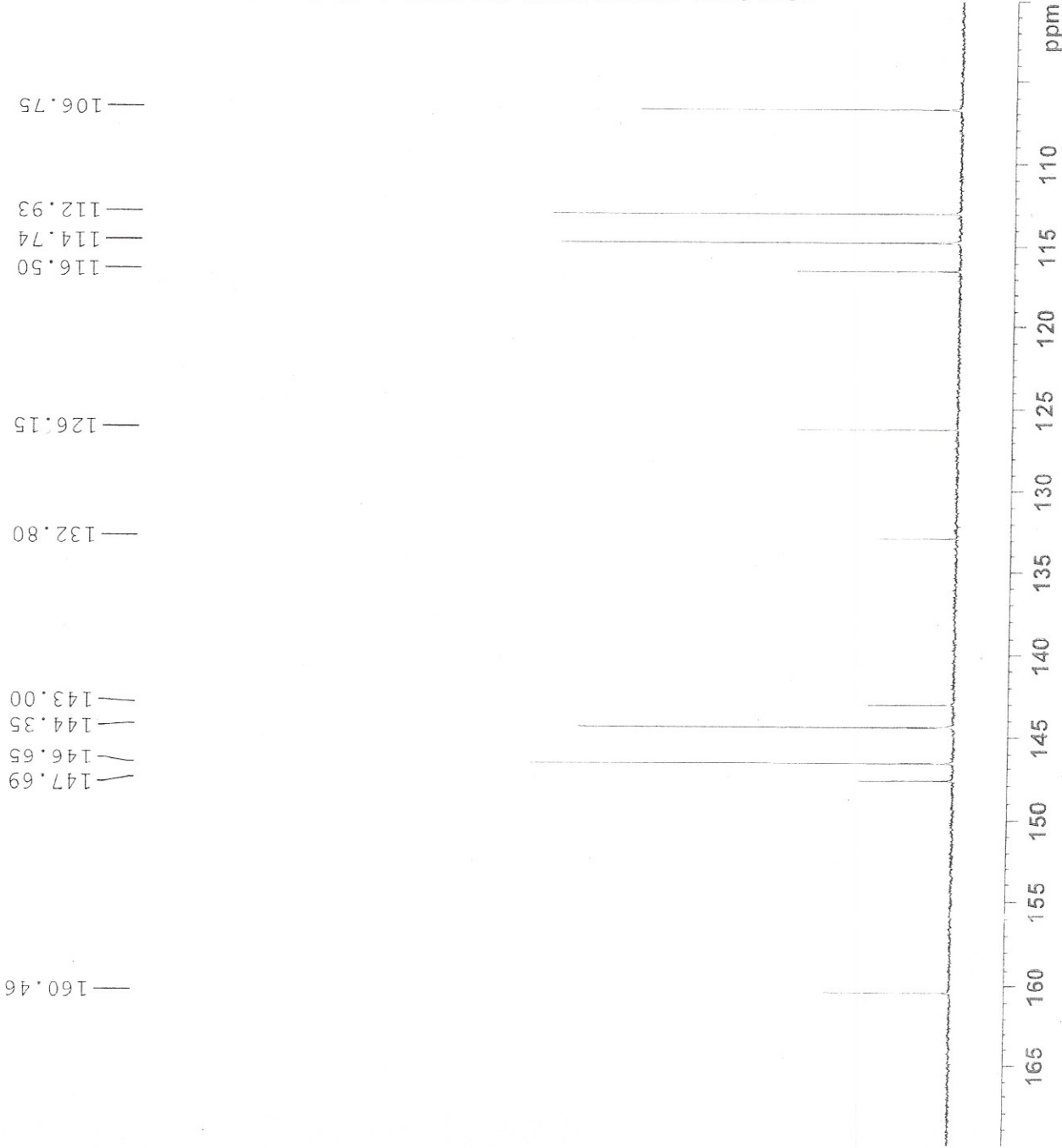
SI 262144
 SF 100.6127684 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40



INDOFINE Chemical Company, Inc.
 121 STRYKER LANE
 BLDG. 30, SUITE 1
 HILLSBOROUGH, NJ 08844



Catalog No.: 020530
 Product Name: Methoxsalen
 Lot No.: 1906263



Current Data Parameters
 NAME May29-2019-10040422-13C NMR CDCl3
 EXPNO 1
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20190529
 Time 18.15 h
 INSTRUM spect
 PROBHD zppg30
 PULPROG zgpg30
 TD 65536
 SOLVENT CDCl3
 NS 1024
 DS 4
 SSBH 24038.461 Hz
 FIDRES 0.733596 Hz
 AQ 1.3631488 sec
 RG 203.3
 RW 20.800 usec
 DE 6.50 usec
 TE 299.5 K
 D1 3.00000000 sec
 E11 0.03000000 sec
 TDO 1
 SFO1 100.6229248 MHz
 NUC1 13C
 P1 10.00 usec
 FLM1 81.926927 W
 SFO2 400.1316095 MHz
 NUC2 1H
 CDEPRG12 waltz16
 PCPD2 50.00 usec
 FLM2 19.00000000 W
 FLM12 0.20840999 W
 PLW13 0.10483000 K

F2 - Processing parameters
 SI 363144
 SF 100.6127684 MHz
 ARW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40