



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: 19-379

Product Name: **8-CHLORO-4'-FLUOROFLAVANONE**

Lot Number: 0308128

Chemical Formula: $C_{15}H_{10}ClFO_2$

Molecular Weight: 276.70

Melting Point: 97-99°C

Appearance: White fluffy powder

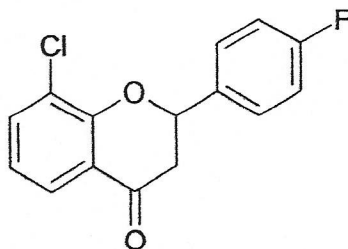
Solubility: Soluble in Chloroform

TLC: Hexane:Ethyl acetate (8:2) - not single

NMR Spectrum: Enclosed (Conforms to the structure)

Storage: Store in a cool, dry place

Purity(HPLC): 96.12%





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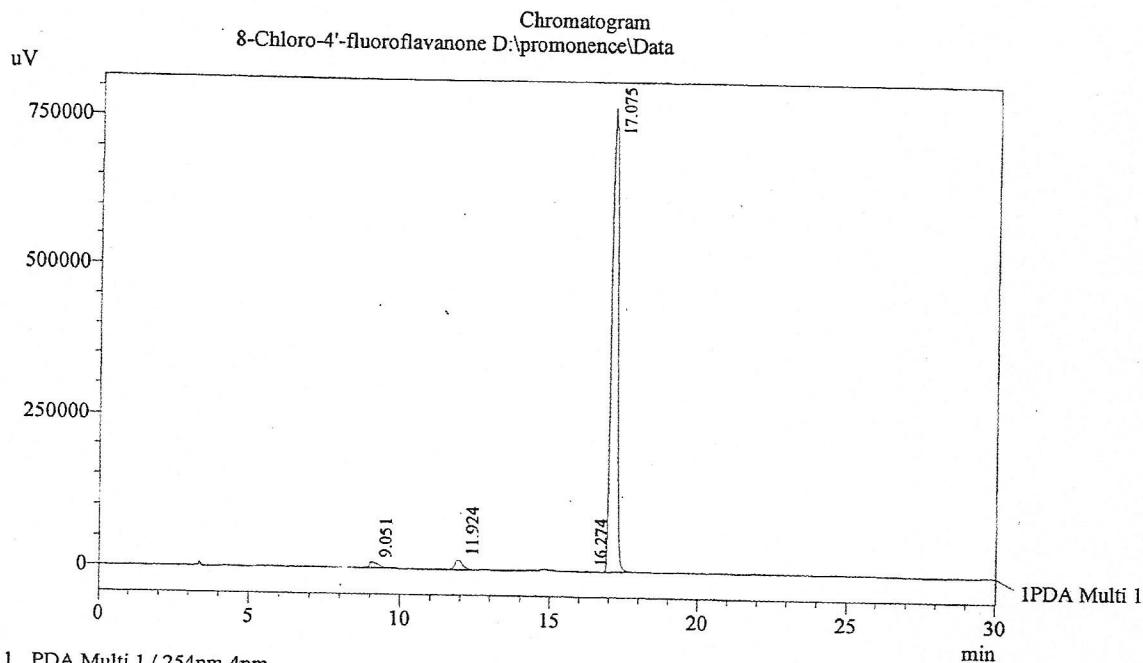
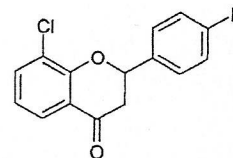
e-mail: chemical@indofinechemical.com

HPLC ANALYSIS

Acquired by : Sanjeev
Sample Name : 8-Chloro-4'-fluoroflavanone
Sample ID : Lot No: 0308128
Injection Volume : 20 uL
Data Filename : 300813J.lcd
Method Filename : Linear Gradient.M.lcm

Catalog No.: 19-379
Product Name: 8-Chloro-4'-fluoroflavanone
Lot No.: 0308128

Column : LUNA C-18(2), (250mm x4.6mm 5.0μ)
Flow : 1.000 mL/min.
Mobile Phase : A(0.1% OPA in water) B(Acetonitrile)
0.01 90 10
12.0 10 90
20.0 10 90
23.0 90 10
30.0 90 10
Diluent : Acetonitrile



1 PDA Multi 1 / 254nm 4nm

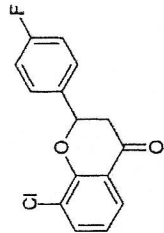
PeakTable

Peak#	Name	Ret. Time	Area	Area %	Relative Retention Time
1	RT:9.051	9.051	176946	1.48	0.53
2	RT:11.924	11.924	269988	2.26	0.70
3	RT:16.274	16.274	17050	0.14	0.95
4	8-Cl-4'-fluoroflavanone	17.075	11504037	96.12	1.00
Total			11968021	100.00	



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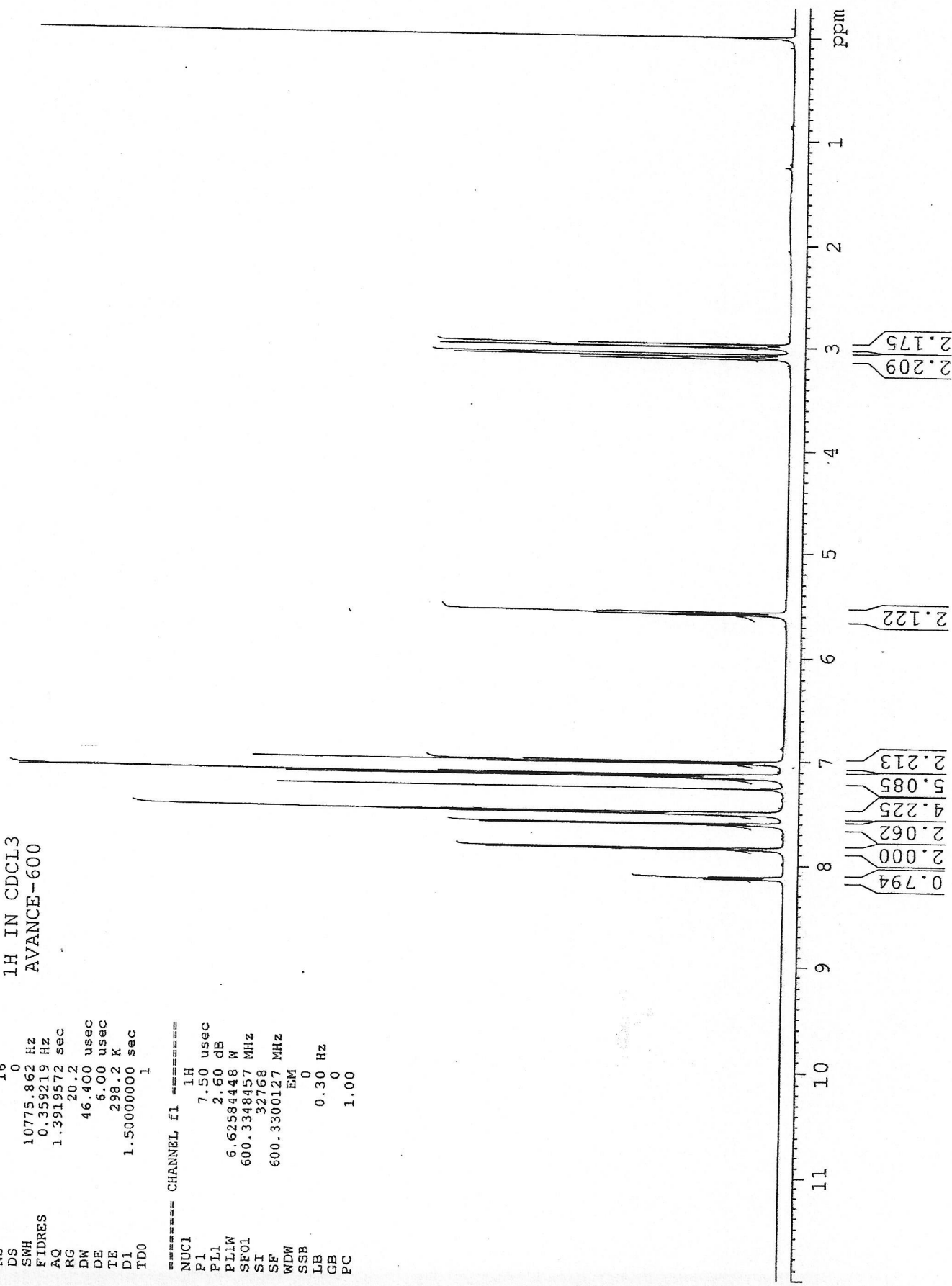
Catalog No.: 19-379
Product Name: 8-Chloro-4'-fluoroflavanone
Lot No.: 0308128



1H IN CDCL3
AVANCE-600

SOLVENT CDCL3
NS 16
DS 0
SWH 10775.862 Hz
FIDRES 0.359219 Hz
AQ 1.3919572 sec
RG 20.2
DW 46.400 usec
DE 6.00 usec
TE 298.2 K
D1 1.50000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 1H
P1 7.50 usec
PL1 2.60 dB
PL1W 6.62584448 W
SF01 600.3348457 MHz
SI 32768
WDW 600.3300127 MHz
EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00





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121 STRYKER LANE

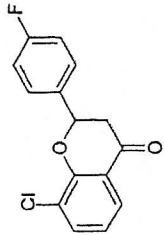
BLDG. 30, SUITE 1

HILLSBOROUGH, NJ 08844

Catalog No.: 19-379

Product Name: 8-Chloro-4'-fluoroflavanone

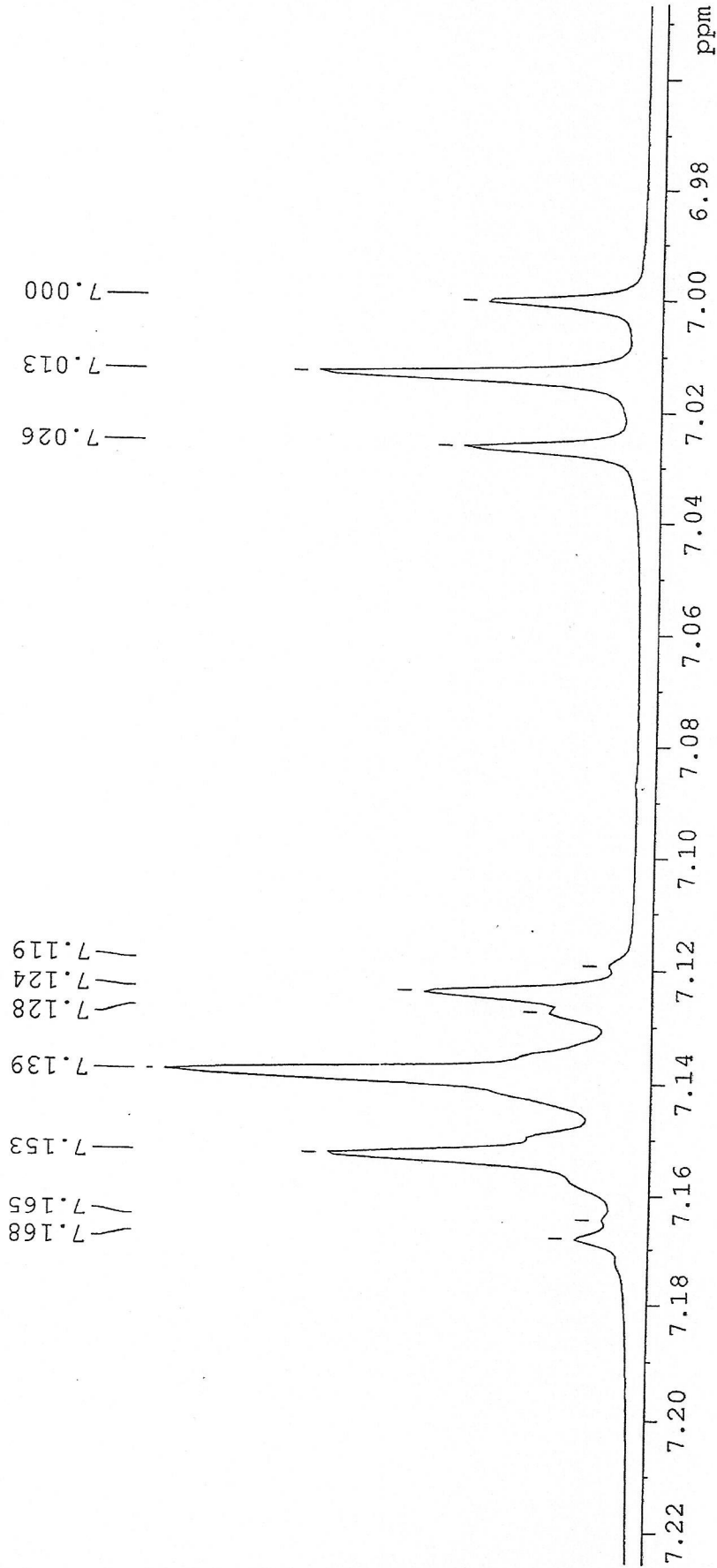
Lot No.: 0308128



SOLVENT CDCL3
NS 16
DS 0
SMH 10775.862 Hz
FIDRES 0.359219 Hz
AQ 1.3919572 sec
RG 20.2
DW 46.400 usec
DE 6.00 usec
TE 298.2 K
D1 1.50000000 sec
TD0 1

1H IN CDCL3
AVANCE-600

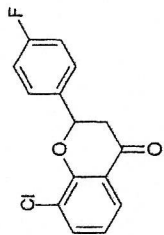
===== CHANNEL f1 =====
NUC1 1H
P1 7.50 usec
PL1 2.60 dB
PL1W 6.62584448 W
SFO1 600.3348457 MHz
SI 32768
SF 600.3300127 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00





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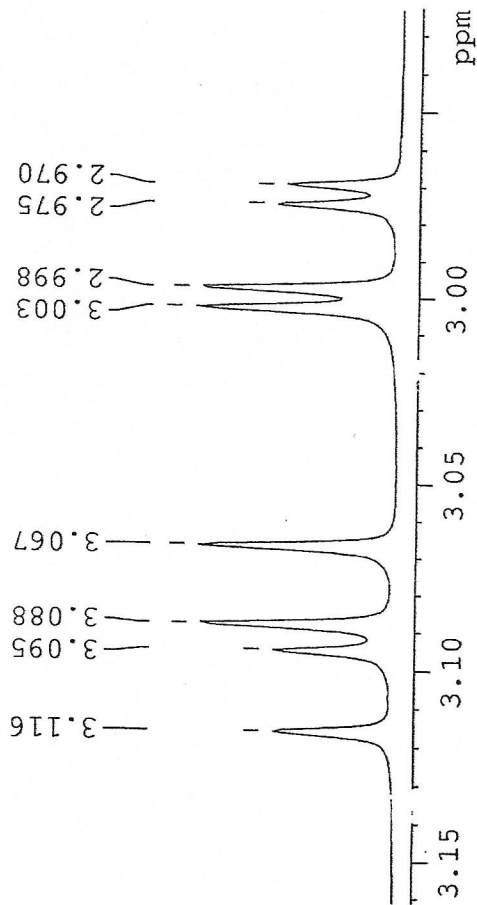
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FIDRES 0.359219 Hz
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D1 1.50000000 sec
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CHANNEL f1
NUC1 1H
P1 7.50 usec
PL1 2.60 dB
PL1W 6.62584448 W
SF01 600.3348457 MHz
SI 32768
SF 600.3300127 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



8.144
8.141
8.135
8.133
8.130
8.124
8.121

7.853
7.851
7.840
7.838

7.612
7.609
7.599
7.596

7.510
7.507
7.501
7.495
7.487

8.15 8.10 8.05 8.00 7.95 7.90 7.85 7.80 7.75 7.70 7.65 7.60 7.55 7.50 ppm