



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

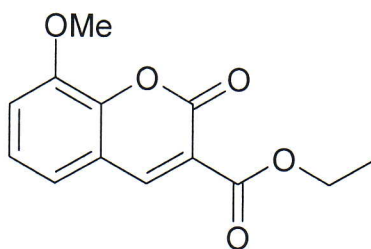
website: www.indofinechemical.com

e-mail: chemical@indofinechemical.com

CERTIFICATE OF ANALYSIS

Cat. No.: 19-671

<u>Product:</u>	ETHYL 8-METHOXYCOUMARIN-3-CARBOXYLATE
<u>Lot No.:</u>	0312209
<u>Molecular Formula:</u>	C ₁₃ H ₁₂ O ₅
<u>Molecular Weight:</u>	248.24
<u>Melting Point:</u>	94-96°C
<u>Appearance:</u>	White crystalline powder
<u>Solubility:</u>	Soluble in Chloroform
<u>TLC:</u>	Hexane : ethyl acetate (7:3)
<u>Purity(HPLC):</u>	99.87%





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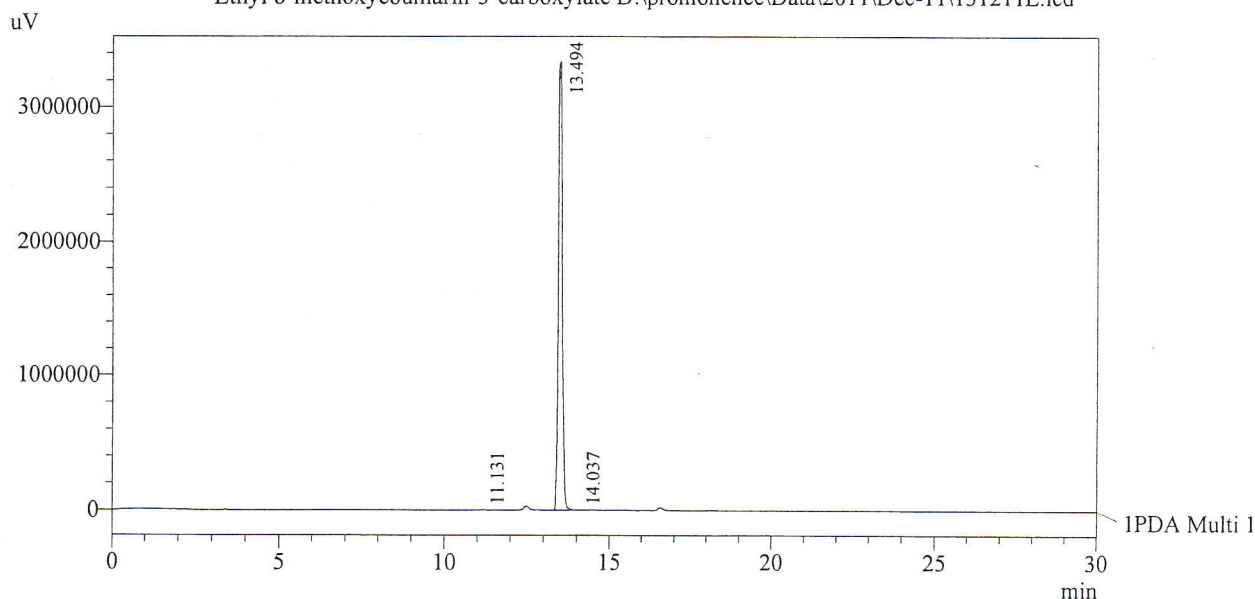
HPLC ANALYSIS

Acquired by : Sanjeev
Sample Name : Ethyl 8-methoxycoumarin-3-carboxylate
Sample ID : Lot No:- 0312209
Injection Volume : 20 uL
Data Filename : 131211E.lcd
Method Filename : Linear Gradient.M.lcm

Cat. No.: 19-671
Product name: Ethyl 8-methoxycoumarin-3-carboxylate
Lot No.: 0312209

Date Acquired : 12/13/2011 12:53:47 PM
Data Processed : 12/13/2011 2:43:26 PM
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
25.0 90 10
30.0 90 10

Chromatogram
Ethyl 8-methoxycoumarin-3-carboxylate D:\promonence\Data\2011\Dec-11\131211E.lcd



1 PDA Multi 1 / 254nm 4nm

PeakTable

PDA Ch1 254nm 4nm

Peak#	Name	Ret. Time	Area	Area %	Relative Retention Time
1	RT:11.131	11.131	18237	0.07	0.82
2	RT:13.494	13.494	27742776	99.87	1.00
3	RT:14.037	14.037	17344	0.06	1.04
Total			27778357	100.00	

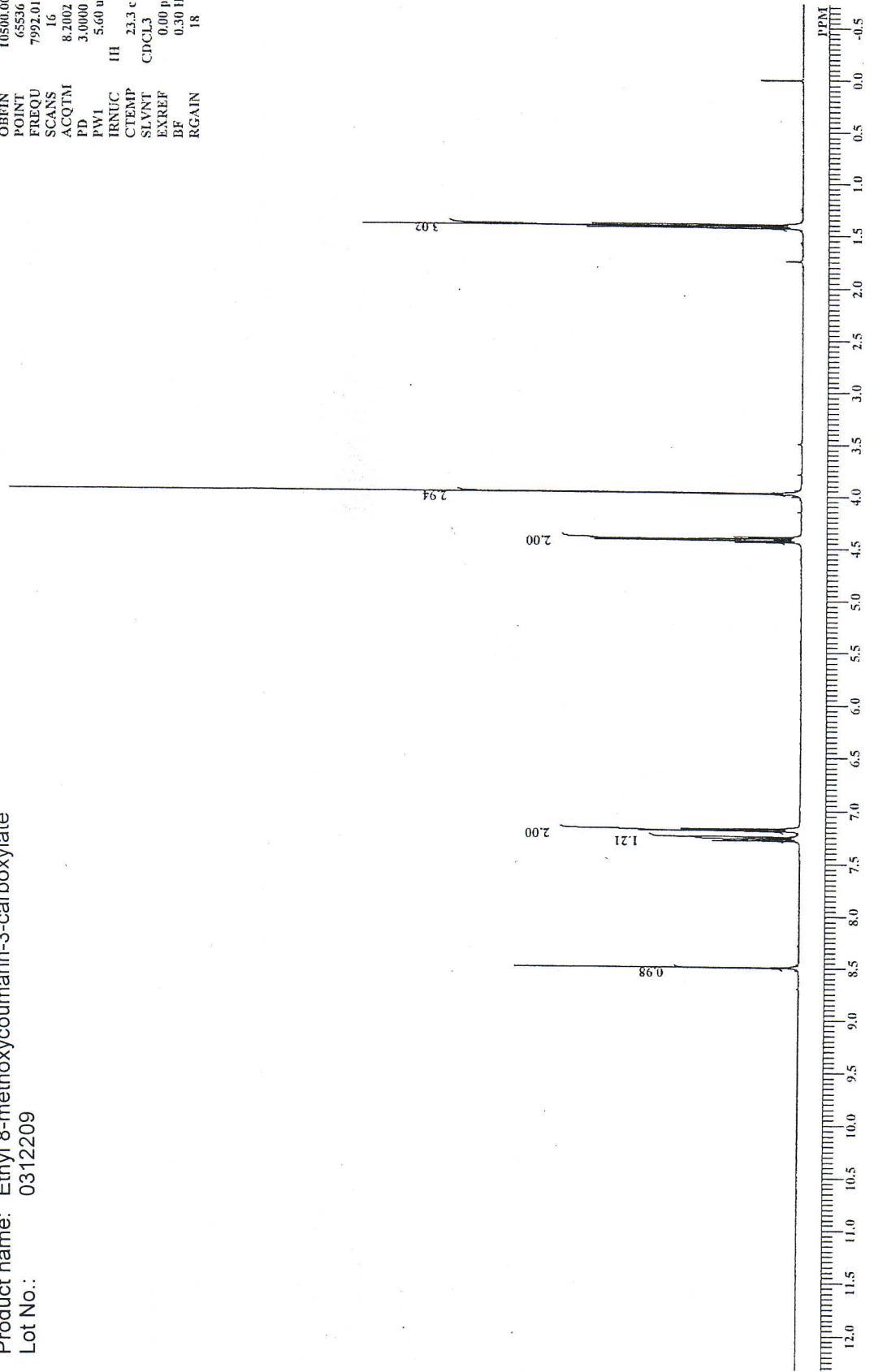


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BLDG. 30, SUITE 1
HILLSBOROUGH, NJ 08844

ICC-11 1H NMR CDC13

Cat. No.: 19-671
Product name: Ethyl 8-methoxycoumarin-3-carboxylate
Lot No.: 0312209

DFILE ICC-11.als
COMNT ICC-11 1H NMR CDC13
DATIM Sun Dec 18 10:59:23 2011
OBNUC 1H
EXMOD NON
OBFREQ 399.65 MHz
OBSET 124.00 KHz
OBRIN 105000.00 Hz
POINT 65536
FREQU 7992.01 Hz
SCANS 16
ACQTM 8.2002 sec
PD 3.0000 sec
PWI 5.60 usec
IRNUC 1H
CTEMP 23.3 c
SLVNT CDCL3
EXREF 0.00 ppm
BF 0.30 Hz
RGAIN 18





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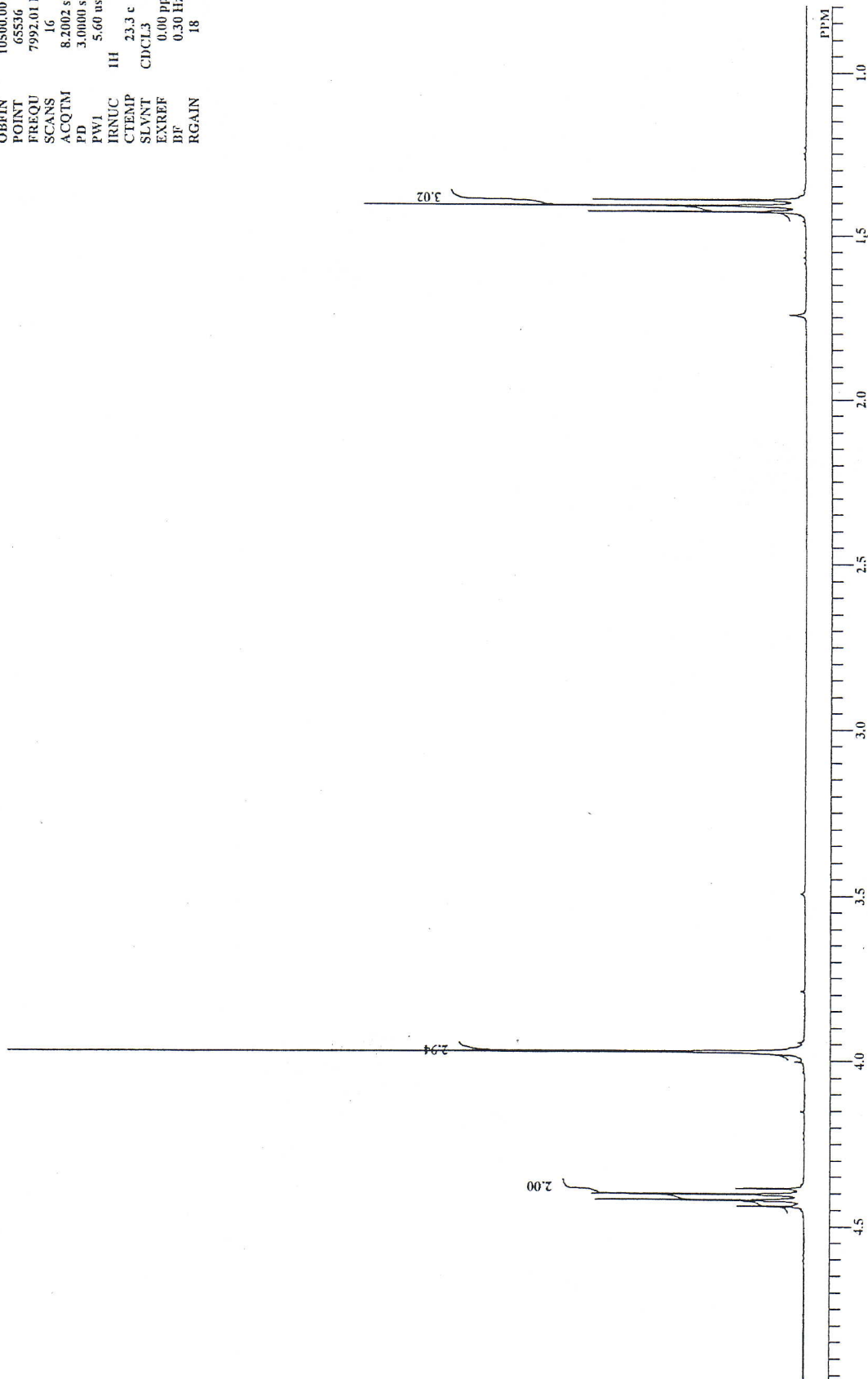
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Product name: Ethyl 8-methoxycoumarin-3-carboxylate

Lot No.: 0312209

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EXMOD NON
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OBSET 124.00 KHz
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SCANS 16
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EXREF 0.00 ppm
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RGAIN 18

ICC-11 1H NMR CDC13





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Cat. No.: 19-671

Product name: Ethyl 8-methoxycoumarin-3-carboxylate

Lot No.: 0312209

ICC-11 1H NMR CDCl3

DFILE ICC-11.als
COMNT ICC-11 1H NMR CDCl3
DATIM Sun Dec 18 10:59:23 2011
OBNUC 1H
EXMOD NON
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