

ICC **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

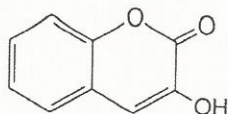
website: www.indofinechemical.com

e-mail: chemical@indofinechemical.com

CERTIFICATE OF ANALYSIS

CAT. No.: 020505

<u>Product Name:</u>	3-HYDROXYCOUMARIN
<u>CAS Number:</u>	[939-19-5]
<u>Lot Number:</u>	98048
<u>Chemical Formula:</u>	C ₉ H ₆ O ₃
<u>Molecular Weight:</u>	162.14
<u>Melting Point:</u>	179-181°C
<u>Appearance:</u>	White powder
<u>TLC:</u>	Chloroform : Methanol (9:1)
<u>Solubility:</u>	Soluble in chloroform
<u>Purity:</u>	99.43%





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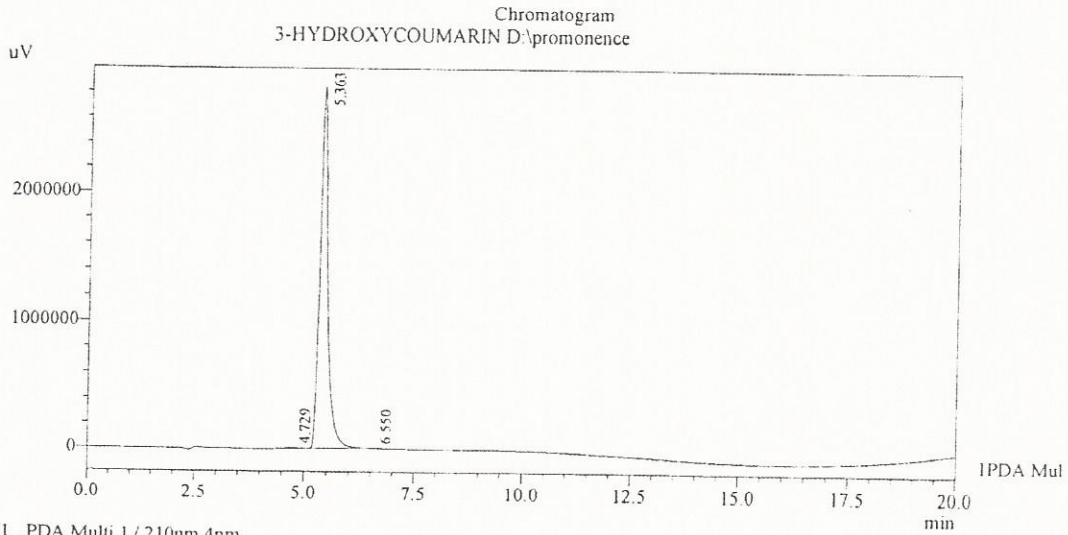
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HPLC ANALYSIS

Acquired by : Madhuri
 Sample Name : 3-HYDROXYCOUMARIN
 Sample ID : Lot No. : 98048
 Injection Volume : 20 uL
 Data Filename : 180111F.lcd
 Method Filename : Linear Isocratic.M.lcm

Cat. No.: 020505
 Product name: 3-Hydroxycoumarin
 Lot No.: 98048

Description:
 Column : Inertsil C-18, 250X4.6mm 5.0µm
 Flow : 1.000ML/min.
 Mobile Phase : A(20% of 0.05% Of TFA) B(80% of ACN)



1 PDA Multi 1 / 210nm 4nm

PeakTable

PDA Ch1 210nm 4nm

Peak#	Ret. Time	Area	Height	Area %
1	4.729	146082	10214	0.410
2	5.363	35395993	2837357	99.435
3	6.550	55029	4003	0.155
Total		35597104	2851574	100.000



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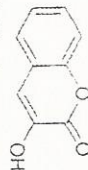
3-HC 1H NMR CDCl3

Cat. No.: 020505

Product name: 3-Hydroxycoumarin

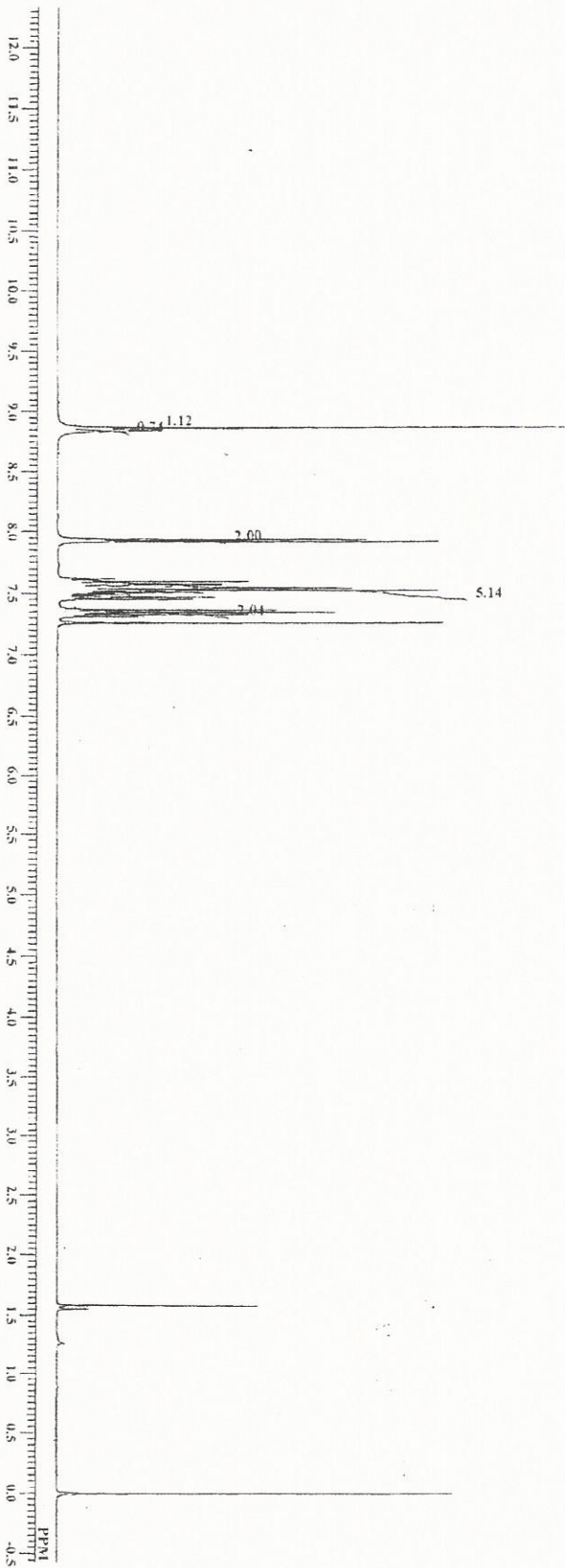
Lot No.: 98048

3-Hydroxycoumarin



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PARAMETER	VALUE
DATE	3/16/05
CONT	3-HC TH NMR CD
ORBIT	NON
ORBIT	399.65 MHz
ORBIT	124.00 kHz
ORBIT	10500.00 Hz
POINT	65536
FREQ	7992.01 Hz
SCANS	8
ACQTM	8.2002 sec
PD	3.0000 sec
PWT	5.60 usec
IRNUC	HI
CTEMP	23.6 c
SOLVT	CDCl3
EXREF	0.00 ppm
BF	0.50 Hz
RGAIN	19





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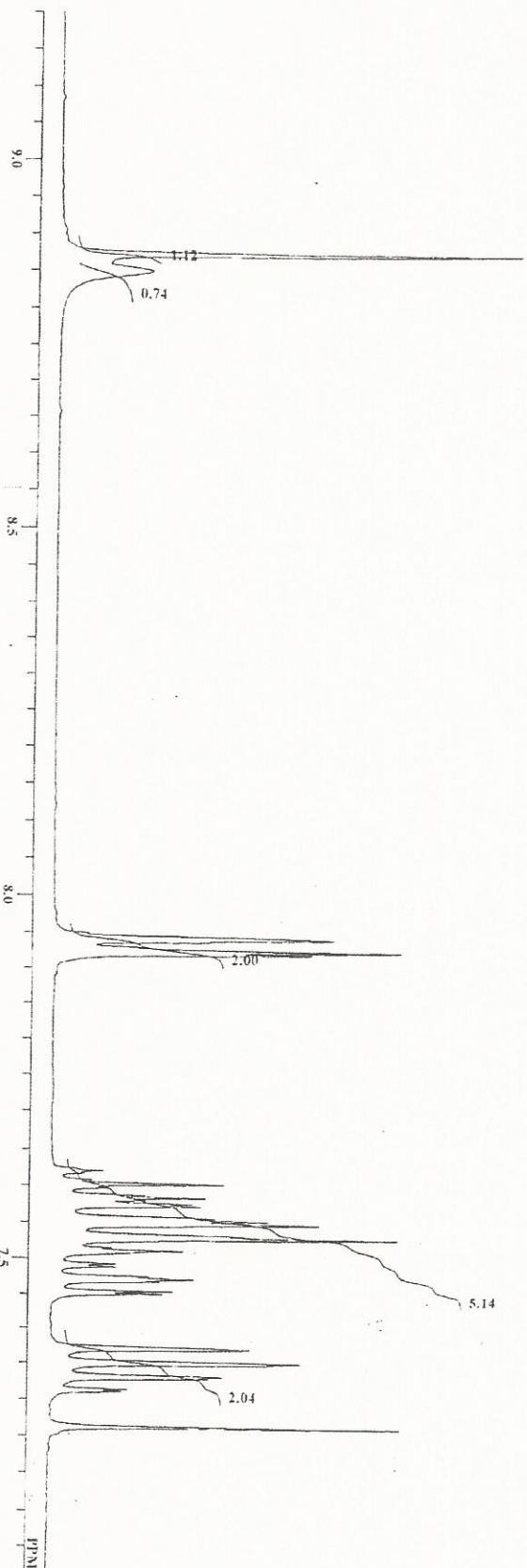
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3-HC 1H NMR CDCl3

Cat. No.: 020505

Product name: 3-Hydroxycoumarin

Lot No.: 98048



g of

DE-FILE	3-HC.cals
COMINT	3-HC 1H NMR C13
ORBIT C	1H
EXMOD	NON
ORPRO	399.65 MHz
OBSETI	124.00 KHz
ORFIN	10500.00 Hz
POINT	65536
FREQU	7992.01 Hz
SCANS	8
ACQTM	8.2002 sec
PD	3.0000 sec
PVI	5.60 usec
IRNOC	1H
CTEMP	23.6 c
SIVNT	CDCl3
EXREF	0.00 ppm
BP	0.50 Hz
RGAIN	19