



INDOFINE Chemical Company, Inc.

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

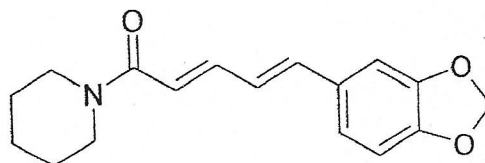
Phone: (908) 359-6778 • FAX: (908) 359-1179

website: www.indofinechemical.com

e-mail: chemical@indofinechemical.com

CERTIFICATE OF ANALYSIS

<u>Catalog Number:</u>	P-003
<u>Product Name:</u>	PIPERINE (1-Piperonylpiperidine)
<u>CAS Number:</u>	[94-62-2]
<u>Lot No.:</u>	1404454
<u>Molecular Formula:</u>	C ₁₇ H ₁₉ NO ₃
<u>Molecular Weight:</u>	285.35
<u>Melting Point:</u>	130-132°C
<u>Appearance:</u>	Pale yellow powder
<u>Moisture(KF):</u>	0.25%
<u>Solubility:</u>	Soluble in chloroform
<u>TLC:</u>	Hexane: Ethyl acetate (8:2)
<u>NMR Spectrum:</u>	Enclosed (conforms to the structure)
<u>Storage:</u>	Store in cool, dry place
<u>Purity(HPLC):</u>	98.22%





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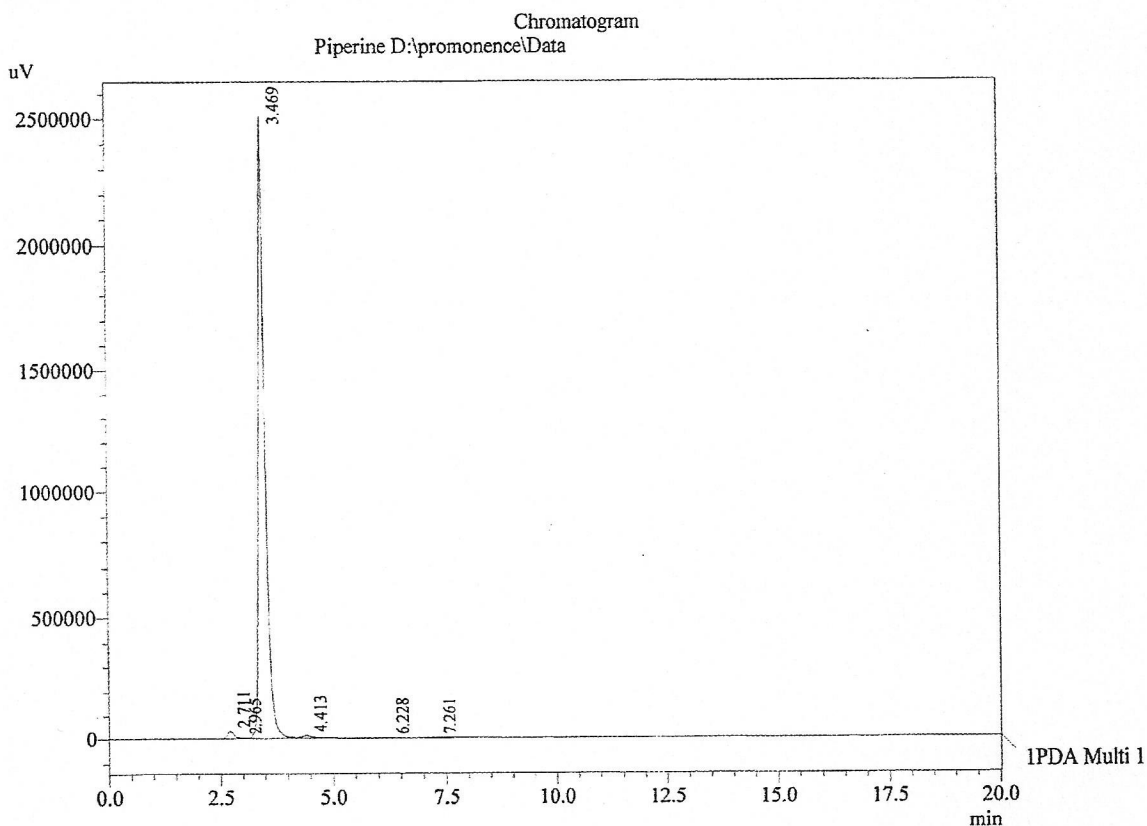
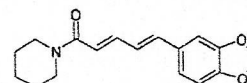
e-mail: chemical@indofinechemical.com

HPLC ANALYSIS

Acquired by : Sanjeev
 Sample Name : Piperine
 Sample ID : 1080 gms Lot
 Injection Volume : 20 uL
 Data Filename : 220314M.lcd
 Method Filename : Linear Isocratic.M.lcm

Catalog No.: P-003
 Product Name: Piperine
 Lot No.: 1404454

Column : Inertsil ODS-3V, (150mm x4.6mm 5.0µ)
 Flow : 1.000 mL/min.
 Mobile Phase : A(30% of 0.01M OPA in water) B(70% of Acetonitrile)



1 PDA Multi 1 / 254nm 4nm

PeakTable

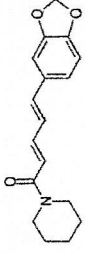
PDA Ch1 254nm 4nm

Peak#	Name	Ret. Time	Area	Area %	Relative Retention Time
1	RT:2.711	2.711	303429	1.21	0.78
2	RT:2.965	2.965	3507	0.01	0.85
3	Piperine	3.469	24543686	98.22	1.00
4	RT:4.413	4.413	128541	0.51	1.27
5	RT:6.228	6.228	3863	0.02	1.80
6	RT:7.261	7.261	6577	0.03	2.09
Total			24989602	100.00	

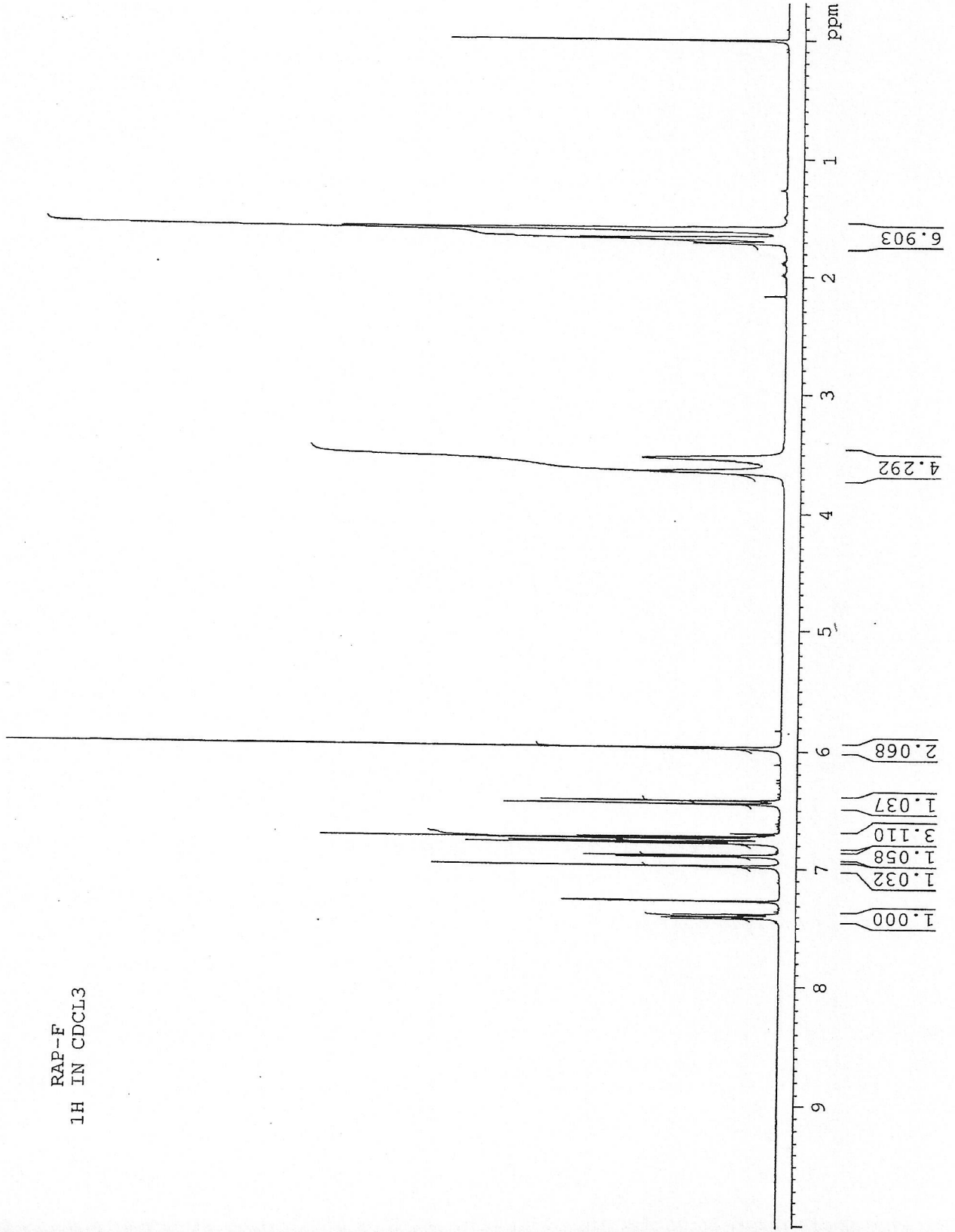


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Catalog No.: P-003
Product Name: Piperine
Lot No.: 1404454



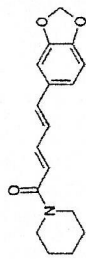
RAP-F
1H IN CDCL3





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Catalog No.: P-003
Product Name: Piperine
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RAP-F
1H IN CDCL3

7.420
7.405
7.396
7.380

7.265

6.898
6.896
6.884
6.883

6.785
6.771
6.748
6.731
6.706

6.450
6.425

