



### CERTIFICATE OF ANALYSIS

<b>Product Name :</b> Nutmeg Oil	<b>Botanical name:</b> <i>Myristica fragrans</i>
<b>Sample Name :</b> Nutmeg Oil	<b>Origin:</b> India
<b>Company Name :</b> Navnetri Gamika Pvt. Ltd., Gurgaon	<b>Batch Number:</b> NG/NU/22-23_001
<b>Temp. :</b> 20°C	<b>Manufacturing/Distillation Method :</b> Steam Distillation
<b>Sample Test Date :</b> 05 April 2022	<b>Part Used:</b> Dried seed of <i>Myristica fragrans</i>
<b>Lab Operator :</b> Ms. Sanju Tyagi	<b>Manufacturing Date :</b> April 2022
	<b>Expiry Date :</b> November 2024
	<b>Storage :</b> Dark and Cool Place in Glass or Aluminum container

S.No.	Parameters	Unit	Result
1	Colour	-	Colorless to yellow
2	Appearance	-	Mobile liquid
3	Odour	-	Delightful, Warm spiciness
4	Flash-point °C :	-	42°C
5	Refractive Index (20°C)	-	1.47 - 1.488
6	Specific Gravity (20°C)	-	0.847 – 0.919
7	Optical Rotation (20°C)	-	(+)8° - (+)25°
8	CAS Number	-	8008-45-5
9	INCI Name :	-	Myristica fragrans Oil

#### CHROMATOGRAPHICAL PROPERTIES

S.No.	Parameters	R.T	AREA
1	5,5-Dimethyl-1-vinylbicyclo[2.1.1]hexane	10.44	0.01
2	β-Thujene	10.58	2.25
3	.alpha.-Pinene	10.895	17.42
4	.beta.-Ocimene	11.32	0.06
5	Camphene	11.402	0.23
6	Sabinene	12.113	20.76
7	.beta.-Pinene	12.323	11.71
8	.beta.-Myrcene	12.457	1.71
9	.alpha.-Phellandrene	13.127	0.94
10	3-Carene	13.366	2.07
11	Isocineole	13.442	0.02
12	.gamma.-Terpinene	13.541	3.49
13	o-Cymene	13.786	2.64
14	D-Limonene	13.984	5.97
15	.beta.-Phellandrene	14.054	2.49
16	Eucalyptol	14.118	0.15

17	.cis- $\beta$ -Ocimene	14.45	0.02
18	.gamma.-Terpinene	15.015	5.45
19	trans-Sabinene hydrate	15.336	0.3
20	.gamma.-Terpinene	16.14	1.95
21	Linalool	16.321	0.6
22	(+)-3-Carene	16.502	0.3
23	$\beta$ -Fenchol	17.149	0.02
24	trans-Sabinene hydroxide	17.388	0.11
25	.alpha.-Phellandrene	18.041	0.08
26	Benzene, (propoxymethyl)-	18.221	0.09
27	1-Pentanone, 1-(2-furanyl)-	19.177	0.02
28	Terpinen-4-ol	19.562	6.29
29	.8-Hydroxy-p-cymene	19.673	0.1
30	.alpha.-Terpineol	19.987	0.88
31	4-Terpinenyl acetate	20.226	0.09
32	Nortricyclyl bromide	20.594	0.03
33	Trifluoroacetyl-lavandulol	22.156	0.04
34	1,4-dihydroxy-p-menth-2-ene	23.03	0.05
35	Bornyl acetate	23.805	0.15
36	Safrole	23.91	1.26
37	Benzaldehyde, 4-butoxy-	24.388	0.17
38	Citronellyl isobutyrate	26.463	0.1
39	(+)-4-Carene	26.65	0.1
40	3,5-Dimethylphenylacetic acid	26.976	0.1
41	Lavandulol acetate	27.897	0.07
42	.alpha.-Cubebene	28.375	0.32
43	Methyleugenol	28.958	1.03
44	(E)- $\beta$ -Farnesene	29.914	0.03
45	Caryophyllene	30.561	0.24
46	.beta.-BERGAMOTENE	30.899	0.1
47	Humulene	32.076	0.04
48	.trans-Methylisoeugenol	33.184	0.28
49	$\beta$ -Bisabolene	33.988	0.05
50	trans-Isomyristicin	34.507	3.42
51	. $\delta$ -Cadinene	34.856	0.15
52	Elemicine	35.731	3.91
53	Isoelemicin	40.388	0.12

\* Maximum concentration determined by the best of our knowledge based on analytical control by Gas Chromatography (DB-WAX Capillary column L 20 m, d 100  $\mu$ m x 0,2  $\mu$ m, Polar stationary phase, T°C oven 60°C at 248°C with 12°C / mn, T°C injector 275°C, T°C detector 275°C, Detector FID, Split injection 0,2  $\mu$ l, Carrier gas Hydrogen - 0,7 ml/mn)

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05-04-2022

Navnetri Gamika Pvt. Ltd, Q-114A, N.P.V.-2, GGN-HR

For NAVNETRI GAMIKA PVT. LTD.  
  
Authorized Signature

NG/NU/22-23

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