

## Vitex Vitex agnus castus

Batch No. BA-59325  
Bosnia

Monoterpenes	37.32%
sabinene	14.94
$\alpha$ -pinene	9.76
limonene	4.81
myrcene	2.20
$\beta$ -pinene	1.40
$\gamma$ terpinene	0.96
para cymene	0.80
2-carene	0.64
$\alpha$ thujene	0.59
$\alpha$ phellandrene	0.39
(E)- $\beta$ -ocimene	0.38
isoterpinolene	0.27
camphene	0.06
(Z)- $\beta$ -ocimene	0.05
pseudolimonene	0.03
hashishene	0.02
thuja-2,4(10)-diene	0.02

Monoterpenols	5.6%
$\alpha$ terpineol	1.99
terpinen-4-ol	1.78
linalool	0.45
delta-terpineol	0.37
carvacrol	0.36
ascaridole	0.17
(E,Z) geranyl linalool	0.14
trans sabinene hydrate	0.12
citronellol	0.09
trans-para-menth-2-en-1-ol	0.07
trans-pinocarveol	0.04
nerol	0.02

Aldehydes	0.01%
phellandral	0.01

Esters	3.58%
$\alpha$ terpinyl acetate	3.11
citronellyl acetate	0.23
bornyl acetate	0.08
delta-terpinyl acetate	0.07
octan-3-yl acetate	0.05
isoamyl acetate	0.04

Ethers	18.74%
1,8 cineole	18.33
caryophyllene oxide	0.41

Ketones	0.23%
camphor	0.10
$\beta$ thujone	0.10
$\alpha$ thujone	0.02
6-methyl-5-hepten-2-one	0.01

Other	0.32%
cembrene	0.14
cubitene	0.14
3-methylpentanol	0.03
4-methyl-pentanol	0.01

Phenols	0.08%
methyl eugenol	0.08

Sesquiterpenenes	31.24%
(E)- $\beta$ -farnesene	10.67
$\beta$ caryophyllene	10.28
bicyclogermacrene	2.82
allo-aromadendrene	1.70
$\delta$ elemene	1.34
$\alpha$ gurjunene	1.04
(Z) $\beta$ farnesene	0.84
(E) $\alpha$ bergamotene	0.53
$\gamma$ cadinene	0.31
aromadendrene	0.26
germacrene d	0.25
$\beta$ bisbolene	0.22
viridiflorene	0.19
7 epi sesquithujene	0.16
$\beta$ gurjunene	0.12
$\beta$ sesquiphellandrene	0.11
$\delta$ cadinene	0.11
$\alpha$ guaiene	0.07
$\beta$ guaiene	0.05
$\gamma$ muurolene	0.05
$\beta$ bourbonene	0.04
$\alpha$ muurolene	0.03
$\gamma$ gurjunene	0.03
(Z)- $\alpha$ -bergamotene	0.02

Sesquiterpenols	1.41%
spathulenol	0.46
ledol	0.26
$\tau$ cadinol	0.23
isopspathulenol	0.16
globulol	0.15
palustrol	0.10
viridiflorol	0.04
$\alpha$ bisabolol	0.01

Client



Source



Vitex (Vitex agnus-castus)  
BA-59325

Sample

Vitex (Vitex agnus-castus)  
Batch #:..... BA-59325  
Type:..... Essential Oil  
CAS Number:.....  
Nature's Gift

Client



Website

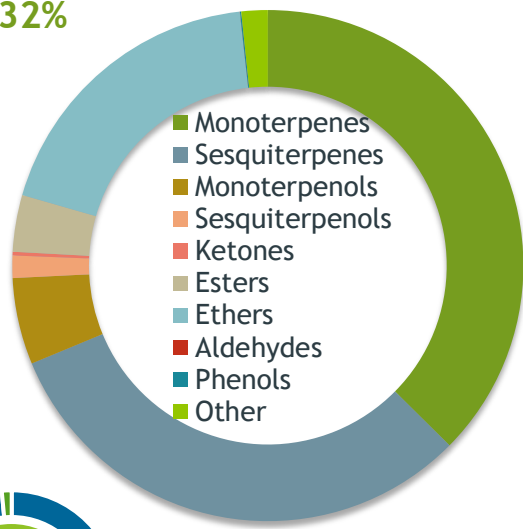


Primary

**18.33%** | **1,8-Cineole**  
**14.94%** | **Sabinene**  
**10.67%** | **(E)-beta-Farnesene**

Monoterpenes

37.32%



Percentage Identified

Result



Conclusion

No adulterants, diluents, or contaminants were detected via this method. This oil meets the expected profile for genuine Essential Oil of Vitex (Vitex agnus-castus)

Internal Number: | EVS-5588



Essential Validation Services

747 SW 2nd Ave IMB 12 Suite 306  
Gainesville, FL 32601

317.361.5044 |  
<https://essentialvalidationservices.com/>

*Alan Christen*

Monoterpenes	37.32%	37.32%
Sesquiterpenes	31.24%	31.24%
Monoterpenols	5.4	5.46%
Sesquiterpenols		1.41%
Ketones		0.23%
Esters	3.	3.58%
Ethers	18.74%	18.74%
Aldehydes		0.01%
Phenols		0.08%
Other		1.66%

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Client



Source

Vitex (*Vitex agnus-castus*)

BA-59325

Total Percentage		98.51%		
Number	RT	Area %	Compound Name	Chemical Family
1	5.30	0.01%	4-methyl-Pentanol	
2	5.54	0.03%	3-Methylpentanol	Aliphatic Alcohol
3	7.88	0.02%	Hashishene	Monoterpene
4	8.13	0.59%	alpha-Thujene	Monoterpene
5	8.39	9.76%	alpha-Pinene	Monoterpene
6	9.00	0.06%	Camphene	Monoterpene
7	9.17	0.02%	Thuja-2,4(10)-diene	Monoterpene
8	9.97	14.94%	Sabinene	Monoterpene
9	10.12	1.40%	beta-Pinene	Monoterpene
10	10.51	0.01%	6-Methyl-5-hepten-2-one	Aliphatic Ketone
11	10.69	2.20%	Myrcene	Monoterpene
12	11.25	0.03%	Pseudolimonene	Monoterpene
13	11.35	0.39%	alpha-Phellandrene	Monoterpene
14	11.82	0.64%	2-Carene	Monoterpene
15	12.16	0.80%	para-Cymene	Monoterpene
16	12.39	4.81%	Limonene	Monoterpene
17	12.48	18.33%	1,8-Cineole	Monoterpene Ether
18	12.74	0.05%	(Z)-beta-Ocimene	Monoterpene
19	13.20	0.38%	(E)-beta-Ocimene	Monoterpene
20	13.67	0.96%	gamma-Terpinene	Monoterpene
21	14.19	0.12%	trans-Sabinene hydrate	Monoterpenol
22	14.90	0.27%	Isoterpinolene	Monoterpene
23	15.62	0.45%	Linalool	Monoterpenol
24	15.83	0.10%	beta-Thujone	Monoterpene Ketone
25	15.93	0.04%	Isoamyl isovalerate	Aliphatic Ester
26	16.36	0.02%	alpha-Thujone	Monoterpene Ketone
27	16.58	0.05%	Octan-3-yl acetate	Aliphatic Ester
28	16.66	0.07%	trans-para-Menth-2-en-1-ol	Monoterpenol
29	17.37	0.04%	trans-Pinocarveol	Monoterpenol
30	17.62	0.10%	Camphor	Monoterpene Ketone
31	18.77	0.37%	delta-Terpineol	Monoterpenol
32	19.23	1.78%	Terpinen-4-ol	Monoterpenol
33	19.92	1.99%	alpha-Terpineol	Monoterpenol
34	21.34	0.02%	Nerol	Monoterpenol
35	21.47	0.09%	Citronellol	Monoterpenol

Client



Source

Vitex (*Vitex agnus-castus*)

BA-59325

Number	RT	Area %	Compound Name	Chemical Family
36	23.581	0.01%	Phellandral	Monoterpenol
37	23.92	0.08%	Bornyl acetate	Monoterpene Ester
38	24.71	0.36%	Carvacrol	Monoterpenol
39	25.22	0.07%	delta-Terpinyl acetate	Monoterpene Ester
40	25.57	0.17%	Ascaridole	Monoterpenol
41	26.01	1.34%	delta-Elemene	Sesquiterpene
42	26.67	3.11%	alpha-Terpinyl acetate	Monoterpene Ester
43	26.88	0.23%	Citronellyl acetate	Monoterpene Ester
44	28.17	0.04%	beta-Bourbonene	Sesquiterpene
45	28.45	0.16%	7-epi-Sesquithujene	Sesquiterpene
46	29.03	0.08%	Methyl eugenol	Phenylpropanoid
47	29.17	1.04%	alpha-Gurjunene	Sesquiterpene
48	29.47	0.02%	cis-alpha-Bergamotene	Sesquiterpene
49	29.67	10.28%	beta-Caryophyllene	Sesquiterpene
50	30.10	0.12%	beta-Gurjunene	Sesquiterpene
51	30.31	0.53%	trans-alpha-Bergamotene	Sesquiterpene
52	30.43	0.26%	Aromadendrene	Sesquiterpene
53	30.61	0.84%	(Z)-beta-Farnesene	Sesquiterpene
54	30.74	0.07%	alpha-Guaiene	Sesquiterpene
55	31.21	10.67%	(E)-beta-Farnesene	Sesquiterpene
56	31.30	1.70%	allo-Aromadendrene	Sesquiterpene
57	31.86	0.03%	gamma-Gurjunene	Sesquiterpene
58	31.97	0.05%	gamma-Murolene	Sesquiterpene
59	32.17	0.25%	Germacrene D	Sesquiterpene
60	32.47	0.05%	beta-Guaiene	Sesquiterpene
61	32.61	0.19%	Viridiflorene	Sesquiterpene
62	32.77	2.82%	Bicyclogermacrene	Sesquiterpene
63	32.94	0.03%	alpha-Murolene	Sesquiterpene
64	33.36	0.22%	beta-Bisabolene	Sesquiterpene
65	33.49	0.31%	gamma-Cadinene	Sesquiterpene
66	33.72	0.11%	delta-Cadinene	Sesquiterpene
67	33.96	0.11%	beta-Sesquiphellandrene	Sesquiterpene
68	35.65	0.10%	Palustrol	Sesquiterpenol
69	35.92	0.46%	Spathulenol	Sesquiterpenol
70	36.08	0.41%	Caryophyllene oxide	Sesquiterpene Ether
71	36.24	0.15%	Globulol	Sesquiterpenol

ESSENTIAL VALIDATION SERVICES | 14 / SW 2<sup>ND</sup> AVE GAINESVILLE, FLORIDA 32601 | 352-350-5044

- Essential Oil testing is performed by using qualitative GC-MS. Method: SOP.T.01 Client Method  
 - This report may not be published without the consent of Essential Validation Services.  
 - Chromatograph image may be requested  
 - This report is valid for 1 year from the analyzed date

