AROMATICS DATA

GC-MS BATCH SUMMARY

Batch AZA-102

November 15, 2026

Hops Oil Azacca

Humulus lupulus

Essential Oil

DISTILLATION DATE	EXTRACTION	CULTIVATION	COUNTRY OF ORIGIN
September 1, 2019	**Steam Distilled**	**Conventional**	**USA**

TOP 5 COMPONENTS

of 76 measured

β-myrcene	Monoterpene	**71.41%**
α-caryophyllene	Sesquiterpene	**7.87%**
β-caryophyllene	Sesquiterpene	**4.98%**
(E)-β-ocimene	Monoterpene	**2.69%**
2-methylbutyl butyrate	Ester	**1.39%**

Full composition · 76 components across 11 families

Monoterpene	**76.16%**
β-myrcene	71.41%
(E)-β-ocimene	2.69%
β-pinene	1.03%
β-phellandrene	0.43%
limonene (d)	0.28%
α-pinene	0.13%
2,6-dimethyl-2,4,6-octatriene	0.06%
(Z)-β-ocimene	0.05%
α-phellandrene	0.04%
α-terpinene	0.02%

Every batch is GC-MS tested by an independent lab. This report is provided for full transparency by Aromatics International.

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psi-limonene	0.02%
Sesquiterpene	**16.08%**
α-caryophyllene	7.87%
β-caryophyllene	4.98%
δ-cadinene	0.66%
γ-muurolene	0.53%
α-copaene	0.37%
γ-cadinene	0.30%
α-selinene	0.17%
cadina-3,5-diene	0.16%
β-cubebene	0.15%
zonarene	0.13%
ε-cadinene	0.09%
sesquiterpene	0.09%
selina-3,7(11)-diene	0.07%
ylangene	0.07%
α-amorphene	0.07%
β-selinene	0.07%
cadina-1,4-diene	0.06%
selinadiene isomer	0.06%
germacrene B	0.05%
γ-selinene	0.04%
germacrene A	0.03%
calamenene	0.03%
α-cubebene	0.03%
Ester	**4.15%**
2-methylbutyl butyrate	1.39%
methyl 4-decenoate	0.59%
2-methylbutyl isobutyrate · 2-methylbutyl-isovalerate	0.53%

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2-pentanyl propionate	0.37%
isobutyl acetate	0.30%
methyl 6-methylheptanoate	0.28%
isoamyl acetate	0.12%
2-methylbutyl isobutyrate · 2-methylbutyl-isobutyrate	0.12%
aliphatic ester	0.06%
methyl decanoate	0.06%
methyl geranate	0.06%
pentyl isovalerate	0.05%
geranyl acetate	0.04%
methyl 4-nonenoate	0.04%
(Z)-3-hexenyl acetate	0.04%
hexenyl ester	0.03%
methyl caproate	0.03%
hexyl acetate	0.02%
neryl butyrate	0.02%
Ketone	**0.85%**
terpenic ketone	0.33%
2-undecanone	0.29%
acetone	0.09%
2-decanone	0.06%
keton compound	0.03%
2-dodecanone	0.03%
geranylacetone	0.02%
Other	**0.79%**
methyl caprylate + 2-nonanone	0.50%
2-tridecanone	0.10%
1,3-cyclododecadiene	0.05%
dodecadiene isomer	0.05%

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γ-terpinene + aliphatic ester	0.04%
keton compound + sesquiterpene	0.03%
hexyl methylpropionate	0.02%
Monoterpenol	**0.41%**
linalool	0.36%
aliphatic alcohol	0.03%
geraniol	0.02%
Diterpene	**0.34%**
geranyl geraniadiene	0.25%
geranylgeraniadiene isomer	0.09%
Sesquiterpenol	**0.12%**
α-muurolol	0.12%
Oxide	**0.04%**
caryophyllene epoxide	0.04%
Aldehyde	**0.03%**
nonanal	0.03%
Furan	**0.02%**
perillene	0.02%

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