AROMATICS DATA

GC-MS BATCH SUMMARY

Batch TIM-109

November 15, 2026

Xanthoxylum Essential Oil

Zanthoxylum armatum

Essential Oil

DISTILLATION DATE	EXTRACTION	CULTIVATION	COUNTRY OF ORIGIN
July 7, 2024	Steam Distilled	Wildcrafted	Nepal

TOP 5 COMPONENTS

of 67 measured

linalool	Monoterpenol	**47.40%**
limonene (d)	Monoterpene	**25.86%**
(E)-methylcinnamate	Ester	**11.93%**
β-myrcene	Monoterpene	**2.90%**
terpinen-4-ol	Monoterpenol	**1.30%**

Full composition · 67 components across 9 families

Monoterpenol	**49.91%**
linalool	47.40%
terpinen-4-ol	1.30%
α-terpineol	0.47%
(Z)-p-Menth-2-en-1-ol	0.17%
(E)-p-menth-2-en-1-ol	0.12%
(E)-piperitol	0.09%
p-cymen-8-ol	0.09%
linalool pyranic oxide	0.06%
τ-cadinol	0.03%
nerol	0.03%

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

Verify this batch: data.aromatics.com/products/xanthoxylum-essential-oil#batch=TIM-109

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(E)-carveol	0.03%
isopulegol	0.03%
neoisopulegol	0.03%
(Z)-p-mentha-2,8-dien-1-ol	0.03%
(E)-p-mentha-2,8-dien-1-ol	0.02%
1-octanol	0.01%
Monoterpene	**32.47%**
limonene (d)	25.86%
β-myrcene	2.90%
p-cymene	0.82%
γ-terpinene	0.51%
terpinolene	0.41%
α-phellandrene	0.33%
sabinene	0.32%
α-terpinene	0.29%
α-pinene	0.29%
styrene	0.23%
β-pinene	0.19%
α-thujene	0.15%
(E)-β-ocimene	0.08%
(Z)-β-ocimene	0.06%
pseudolimonene	0.03%
Ester	**12.29%**
(E)-methylcinnamate	11.93%
(Z)-3-hexenyl butyrate	0.13%
methyl palmitate	0.07%
(Z)-methylcinnamate	0.04%
methyl citronellate	0.04%
linalyl acetate	0.03%

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geranyl formate	0.01%
citronellyl acetate	0.01%
methyl oleate	0.01%
geranyl acetate	0.01%
ethyl (E)-cinnamate	0.01%
Oxide	**1.02%**
linalool (Z)-oxide	0.49%
(E)-linalool oxide	0.36%
caryophyllene oxide	0.15%
humulene epoxide 2	0.02%
Ketone	**0.95%**
cryptone	0.47%
piperitone	0.40%
carvone	0.06%
valeranone	0.01%
α-thujone	0.01%
Sesquiterpene	**0.79%**
β-caryophyllene	0.61%
α-caryophyllene	0.11%
γ-cadinene	0.04%
δ-cadinene	0.02%
α-copaene	0.01%
Aldehyde	**0.65%**
phellandral	0.50%
cuminal	0.05%
benzaldehyde	0.04%
citronellal	0.03%
decanal	0.03%

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Other	**0.41%**
4-hydroxy-cryptone	0.24%
2-tridecanone	0.06%
(2E)-nonenol	0.05%
palmitic acid	0.04%
dehydro-p-cymene	0.02%
Furan	**0.01%**
perillene	0.01%

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