AROMATICS DATA

GC-MS BATCH SUMMARY

Batch VTG-102

November 26, 2026

Vetiver Green Essential Oil

Chrysopogon zizanioides

Essential Oil

DISTILLATION DATE	EXTRACTION	CULTIVATION	COUNTRY OF ORIGIN
March 15, 2026	Steam Distilled	Wildcrafted	India

TOP 5 COMPONENTS

of 77 measured

khusinol	Sesquiterpenol	13.06%
khusimol	Sesquiterpenol	11.45%
khusilal	Other	7.61%
(E)-isovalencenal	Other	7.56%
zizanone<epi->	Other	5.08%

Vetiver Green (*Chrysopogon zizanioides*) batch VTG-102 comes from wildcrafted roots harvested in India and steam distilled in March 2026. Its aroma is deeply earthy and rooty, with a smoky sweetness and a fresh, green character that distinguishes it from more traditional Vetiver oils.

This distinctive aromatic profile offers the rich, grounding depth associated with Vetiver while introducing a lighter, greener dimension. Its complexity and lasting character make it particularly appealing for creating depth and balance in aromatic blends.

As with every essential oil we source, batch VTG-102 has been independently GC-MS tested to verify its chemical composition.

The complete GC-MS report and Certificate of Analysis are available to download, providing full transparency into the oil's quality and composition.

CHEMISTRY HIGHLIGHTS

GC-MS analysis of batch VTG-102 identified 77 components, revealing a complex profile dominated by sesquiterpenoid compounds, with little contribution from lighter monoterpenes. Sesquiterpenols account for 32.87% of the oil, led by khusinol (13.06%) and khusimol (11.45%), two prominent constituents of its characteristic Vetiver chemistry.

The carbonyl-containing compounds add another interesting dimension to this batch. Khusilal (7.61%) and (E)-isovalencenal (7.56%) are particularly abundant, followed by epi-zizanone (5.08%), zizanal (2.37%), and khusimone (2.27%). Together with the sesquiterpene alcohols, these constituents contribute to the oil's intricate chemical profile.

Two additional details stand out in the analysis. Both (E)-isovalencenal (7.56%) and its (Z)-isomer (0.33%) are present, illustrating the structural diversity within the oil. The related compounds nootkatol (0.52%) and nootkatone (0.21%) also appear in smaller amounts.

This rich combination of sesquiterpene alcohols, aldehydes, and ketones gives VTG-102 its distinctive chemical fingerprint and reflects the complexity that makes Vetiver such a fascinating essential oil to study.

Full composition · 77 components across 7 families

Sesquiterpenol	**32.87%**
khusinol	13.06%
khusimol	11.45%
cubenol	2.69%
1,10-epi-cubenol	1.42%
α-muurolol	0.80%
ledol	0.78%
γ-eudesmol	0.72%
nootkatol	0.52%
viridiflorol	0.38%
vetiselinenol	0.38%
elemol	0.35%
epi-cubebol	0.21%
(E)-sesquisabinene hydrate	0.11%
Other	**28.69%**
khusilal	7.61%

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(E)-isovalencenal	7.56%
zizanone<epi->	5.08%
khusiol	2.72%
valencene<13-hydroxy->	1.31%
muurolene<14-oxy-α->	1.00%
cedrenal<1,7-diepi-α->	0.92%
Cedr-8(15)-en-10-ol	0.71%
Selina-3,11-dien-6-α-ol	0.57%
(Z)-Isovalencenal	0.33%
β-vetispirene	0.17%
2-epi-β-funebrene	0.16%
Muurolene<14-hydroxy-α->	0.13%
Mayurone<cis-dihydro->	0.12%
acora-3,7(14)-diene	0.10%
Cadinene<α->	0.10%
2-Norzizaene	0.03%
ylangene<β->	0.03%
Butanediol<2,3->	0.02%
3-Hexanone	0.01%
octane	0.01%
Sesquiterpene	**5.58%**
γ-cadinene	1.16%
α-amorphene	0.74%
khusimene	0.64%
β-vetivenene	0.54%
δ-amorphene	0.51%
prezizaene	0.42%
δ-cadinene	0.37%
γ-muurolene	0.20%
β-cedrene	0.11%

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β-caryophyllene	0.09%
(Z)-cadina-1(6),4-diene	0.09%
α-calacorene	0.09%
β-bisabolene	0.08%
β-acoradiene	0.07%
δ-selinene	0.06%
δ-guaiene	0.06%
(E)-cadina-1,4-diene	0.06%
α-gurjunene	0.05%
β-guaiene	0.05%
epizonarene	0.05%
2-epi-α-funebrene	0.04%
β-sesquiphellandrene	0.04%
(E)-α-bisabolene	0.04%
α-cubebene	0.01%
β-copaene	0.01%
Aldehyde	**3.29%**
zizanal	2.37%
isobicyclogermacrenal	0.92%
Ketone	**2.48%**
khusimone	2.27%
nootkatone	0.21%
Oxide	**0.56%**
caryophyllene oxide	0.49%
sesquicineole	0.07%
Ester	**0.32%**
(Z)-muurola-3,5-diene · cis-muurola-3,5-diene	0.23%
(Z)-muurola-4(14),5-diene	0.05%
(Z)-muurola-3,5-diene · trans-muurola-3,5-diene	0.04%

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Unidentified peaks	**18.08%**
9 peaks the lab could not identify	18.08%

UK BP: 91 · RT 39.41 min 5.48% · UK BP: 160 · RT 41.45 min 3.12% · UK BP: 189 · RT 42.21 min 2.21% · UK BP: 135 · RT 40.59 min 1.81% · UK BP: 189 · RT 42.51 min 1.53% · UK BP: 160 · RT 41.19 min 1.45% · UK BP: 161 · RT 37.01 min 1.03% · UK BP: 159 · RT 41.13 min 0.81% · UK BP: 91 · RT 40.31 min 0.64%

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