AROMATICS DATA

GC-MS BATCH SUMMARY

**Batch HSL-107**

November 26, 2026

# Helichrysum Splendidum Essential Oil

*Helichrysum splendidum*

Essential Oil

| DISTILLATION DATE | EXTRACTION | CULTIVATION | COUNTRY OF ORIGIN |
|---|---|---|---|
| November 28, 2023 | Steam Distilled | Organically Grown | South Africa |

**TOP 5 COMPONENTS** — of 96 measured

| | | |
|---|---|---|
| β-phellandrene | Monoterpene | 17.36% |
| δ-cadinene | Sesquiterpene | 11.73% |
| germacrene D | Sesquiterpene | 7.44% |
| β-pinene | Monoterpene | 6.65% |
| γ-cadinene | Sesquiterpene | 6.10% |

Batch HSL-107 comes from organically grown *Helichrysum splendidum* in South Africa, steam distilled in late November 2023. This beautiful helichrysum has a greener, more resinous character than its better-known relatives. Its fresh, herbaceous opening gradually softens into a warm, woody base, giving the oil an earthy, grounding presence.

South Africa is home to this distinctive species, and its aromatic profile reflects the character of the plant and its growing environment.

Every batch we bring in is independently GC-MS tested to verify its chemical composition and reveal its individual characteristics. The complete GC-MS report and certificate of analysis for HSL-107 are available to download here.

**CHEMISTRY HIGHLIGHTS**

GC-MS analysis of batch HSL-107 identified 96 components, with sesquiterpenes making up 48.88% of the oil, followed by monoterpenes at 28.60% and approximately 10% sesquiterpenols.



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β-Phellandrene is the leading constituent at 17.36%, followed by δ-cadinene at 11.73% and germacrene D at 7.44%. The cadinane-related compounds are especially well represented, including γ-cadinene (6.10%), α-muurolene (3.52%), α-cadinol (2.46%), and τ-muurolol (1.11%). Both α-cadinol and α-muurolene exceed the ranges previously recorded in our other batches, making them interesting features of this particular oil.

One of the most striking differences is the absence of 1,8-cineole. This constituent has appeared in three of our six analyzed *Helichrysum splendidum* batches, ranging from 0.81% to 20.99%. In HSL-107, the oxide fraction is just 0.15%, represented entirely by caryophyllene oxide.

Borneol (0.68%) and its related ester, bornyl acetate (0.39%), are also present in smaller amounts. Together, these details reveal the individuality of HSL-107 and illustrate just how much the chemistry of the same botanical species can vary from batch to batch.

Full composition · 96 components across 12 families

| **Sesquiterpene** | **49.92%** |
|---|---|
| δ-cadinene | 11.73% |
| germacrene D | 7.44% |
| γ-cadinene | 6.10% |
| bicyclogermacrene | 3.93% |
| α-muurolene | 3.52% |
| β-bourbonene | 2.61% |
| β-elemene | 2.14% |
| γ-muurolene | 1.99% |
| β-caryophyllene | 1.25% |
| δ-elemene | 1.08% |
| epi-bicyclosesquiphellandrene | 1.04% |
| α-cadinene | 0.91% |
| α-copaene | 0.88% |
| β-copaene | 0.83% |
| β-selinene | 0.70% |
| allo-aromadendrene | 0.68% |
| (Z)-cadina-1(6),4-diene | 0.59% |
| α-cubebene | 0.37% |

| | |
|---|---|
| β-cubebene | 0.37% |
| α-caryophyllene | 0.34% |
| aromadendrene | 0.32% |
| (E)-cadina-1,4-diene | 0.32% |
| α-calacorene | 0.21% |
| 11-α-h-himachala-1,4-diene | 0.19% |
| dauca-5,8-diene | 0.13% |
| α-gurjunene | 0.12% |
| longicyclene | 0.06% |
| α-ylangene | 0.05% |
| (E,E)-α-farnesene | 0.01% |
| sibirene | 0.01% |
| **Monoterpene** | **28.60%** |
| β-phellandrene | 17.36% |
| β-pinene | 6.65% |
| α-pinene | 1.83% |
| sabinene | 0.85% |
| camphene | 0.50% |
| (E)-β-ocimene | 0.40% |
| β-myrcene | 0.20% |
| terpinolene | 0.17% |
| γ-terpinene | 0.14% |
| α-terpinene | 0.14% |
| α-phellandrene | 0.12% |
| δ-2-carene | 0.11% |
| α-thujene | 0.07% |
| (Z)-β-ocimene | 0.05% |
| bornylene | 0.01% |


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| | |
|---|---|
| **Sesquiterpenol** | **10.13%** |
| spathulenol | 2.96% |
| α-cadinol | 2.46% |
| τ-muurolol | 1.11% |
| cubebol | 1.01% |
| epi-cubenol | 0.64% |
| viridiflorol | 0.58% |
| α-muurolol | 0.56% |
| 1,10-epi-cubenol | 0.43% |
| globulol | 0.15% |
| isospathulenol | 0.12% |
| guaiol | 0.04% |
| ledol | 0.04% |
| β-costol | 0.03% |
| **Monoterpenol** | **3.59%** |
| τ-cadinol | 2.42% |
| borneol | 0.68% |
| terpinen-4-ol | 0.32% |
| (E)-p-mentha-1(7),8-dien-2-ol | 0.05% |
| linalool | 0.05% |
| (E)-sabinene hydrate | 0.03% |
| (E)-p-menth-2-en-1-ol | 0.02% |
| (E)-pinocarveol | 0.02% |
| **Ester** | **2.04%** |
| (Z)-muurola-4(14),5-diene | 0.99% |
| (Z)-muurola-3,5-diene | 0.60% |
| bornyl acetate | 0.39% |
| isoamyl angelate | 0.04% |
| isoamyl acetate | 0.01% |


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| | |
|---|---|
| isoamyl isovalerate | 0.01% |
| **Other** | **0.51%** |
| Muurol-5-en-4-α-ol<cis-> | 0.16% |
| Germacra-4(15),5,10(14)-trien-1-α-ol | 0.12% |
| trans-calamenen-10-ol | 0.05% |
| cadalene | 0.05% |
| α-costol | 0.03% |
| oplopanone | 0.03% |
| cis-lanceol | 0.02% |
| callitrin | 0.01% |
| phytone | 0.01% |
| (E)-calamenene | 0.01% |
| 2-methyl butyl isovalerate | 0.01% |
| shyobunol | 0.01% |
| **Ketone** | **0.39%** |
| carvotanacetone | 0.18% |
| camphor | 0.12% |
| cryptone | 0.07% |
| 6-methyl-5-hepten-2-one | 0.01% |
| pinocarvone | 0.01% |
| **Oxide** | **0.15%** |
| caryophyllene oxide | 0.15% |
| **Diterpene** | **0.11%** |
| cembrene | 0.11% |
| **Aldehyde** | **0.08%** |
| pentadecanal | 0.06% |
| nonanal | 0.01% |
| phellandral | 0.01% |

| | |
|---|---|
| **Phenol** | **0.03%** |
| carvacrol | 0.03% |
| **Ether** | **0.01%** |
| 2-methylanisole | 0.01% |

| REFRACTIVE INDEX @20°C | OPTICAL ROTATION @20°C |
|---|---|
| **1.4957** | **-9.34** |



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