AROMATICS DATA

GC-MS BATCH SUMMARY

Batch SPE-111

November 14, 2026

Spearmint Essential Oil

Mentha spicata

Essential Oil

DISTILLATION DATE	EXTRACTION	CULTIVATION	COUNTRY OF ORIGIN
July 15, 2026	Steam Distilled	Organically Grown	India

TOP 5 COMPONENTS

of 92 measured

carvone	Ketone	55.35%
limonene (d)	Monoterpene	21.67%
β-myrcene	Monoterpene	2.37%
1,8-cineole	Oxide	2.19%
(Z)-dihydrocarvone	Ketone	1.54%

Batch SPE-111 comes from organically grown spearmint in India, steam distilled from the fresh herb in July 2026. *Mentha spicata* gives a sweet, green, gently cooling mint aroma, rounder and softer than peppermint, and this distillation captures that brightness beautifully.

Ketones dominate at nearly 58%, the family behind spearmint's clearing, invigorating character, while monoterpenes at just over 28% lend the fresh, uplifting top note many people reach for when they want a sense of clarity and refreshment.

Every batch we bring in is independently GC-MS tested before it reaches you, and the full report and certificate of analysis for SPE-111 are available to download here. You are welcome to read the same chemistry we do.

CHEMISTRY HIGHLIGHTS

SPE-111 leads with carvone at 55.35% and limonene comes in at 21.67%. Limonene is the biosynthetic precursor carvone is built from.

The downstream chain is visible too. (Z)-dihydrocarvone at 1.54%, neo-dihydrocarveol at 0.53%, (E)- and

(Z)-carveol at 0.50% and 0.24%, and (E)-carvyl acetate at 0.18% sitting alongside its parent alcohol. Ninety-two components in total, with the tail below 0.1% doing most of the aromatic nuance.

Full composition · 92 components across 10 families

Ketone	**57.82%**
carvone	55.35%
(Z)-dihydrocarvone	1.54%
piperitone	0.25%
(E)-dihydrocarvone	0.21%
(Z)-jasmone	0.13%
isomenthone	0.12%
menthone	0.12%
isopiperitenone	0.05%
pulegone	0.02%
piperitenone	0.02%
carvotanacetone	0.01%
Monoterpene	**28.09%**
limonene (d)	21.67%
β-myrcene	2.37%
β-pinene	1.20%
α-pinene	1.12%
sabinene	0.71%
γ-terpinene	0.23%
p-cymene	0.18%
α-terpinene	0.13%
terpinolene	0.13%
δ-3-carene	0.12%
hashishene	0.10%
α-thujene	0.05%
(Z)-β-ocimene	0.05%

camphene	0.03%
Sesquiterpene	**4.35%**
β-bourbonene	1.22%
β-caryophyllene	0.87%
(Z)-β-farnesene	0.66%
germacrene D	0.64%
β-copaene	0.26%
β-elemene	0.23%
α-caryophyllene	0.12%
longifolene	0.09%
allo-aromadendrene	0.09%
δ-cadinene	0.05%
α-copaene	0.04%
isocaryophyllene	0.02%
γ-muurolene	0.02%
α-muurolene	0.02%
γ-amorphene	0.02%
Monoterpenol	**4.02%**
menthol	1.48%
terpinen-4-ol	0.64%
(E)-carveol	0.50%
(E)-sabinene hydrate	0.33%
α-terpineol	0.30%
(Z)-carveol	0.24%
p-mentha-1,5-dien-8-ol	0.08%
δ-terpineol	0.08%
1-octanol	0.06%
(Z)-sabinene hydrate	0.04%
(Z)-p-mentha-2,8-dien-1-ol	0.04%

Generated November 14, 2026 from live batch data · © 2026 Aromatics International

(E)-pinocarveol	0.04%
isopulegol	0.04%
(E)-p-mentha-2,8-dien-1-ol	0.03%
borneol	0.03%
3-hexen-1-ol	0.02%
(Z)-p-Menth-2-en-1-ol	0.02%
(E)-p-menth-2-en-1-ol	0.02%
(E)-p-mentha-1(7),8-dien-2-ol	0.02%
2-octanol	0.01%
Oxide	**2.31%**
1,8-cineole	2.19%
(Z)-limonene oxide	0.06%
caryophyllene oxide	0.03%
(E)-limonene oxide	0.02%
piperitenone oxide	0.01%
Other	**1.39%**
neo-dihydrocarveol	0.53%
ylangene<β->	0.28%
cis-carvone oxide	0.11%
2,5-Diethyltetrahydrofu...an	0.10%
trans-carvone oxide	0.10%
Trimenal<Z->	0.06%
octanol acetate	0.04%
edulan ii, dihydro-	0.04%
Neryl acetone	0.04%
Ocimene<allo->	0.03%
Butanediol<2,3->	0.02%
geranyl linalool<z,z->	0.02%
octane	0.01%

Generated November 14, 2026 from live batch data · © 2026 Aromatics International

phenylethyl alcohol	0.01%
Ester	**0.59%**
(E)-carvyl acetate	0.18%
3-octyl acetate	0.14%
dihydrocarvyl acetate	0.10%
(Z)-3-hexenyl isovalerate	0.06%
2-methylbutyl 2-methylbutyrate	0.04%
menthyl acetate	0.03%
1-octen-3-yl acetate	0.02%
myrtenyl acetate	0.02%
Sesquiterpenol	**0.55%**
3-octanol	0.46%
viridiflorol	0.08%
1-octen-3-ol	0.01%
Aldehyde	**0.03%**
octanal	0.03%
Phenol	**0.03%**
eugenol	0.03%

Generated November 14, 2026 from live batch data · © 2026 Aromatics International