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Frankincense

Boswellia carterii var Birdwell

Batch #SO-59005

Somalia, Organically produced

Monoterpenes 80.78%

α pinene	41.29
limonene	14.24
myrcene	7.38
sabinene	6.07
para cymene	3.52
α phellandrene	2.52
β pinene	1.38
α thujene	1.16
β phellandrene	0.83
camphene	0.75
δ carene	0.45
thujadiene	0.45
γ terpinene	0.32
terpinolene	0.23
β ocimene	0.19

Sesquiterpene 7.26%

β caryophyllene	2.88
β elemene	0.93
α copaene	0.63
δ cadinene	0.57
α humulene	0.55
germacrene D	0.43
β selinene	0.32
γ cadinene	0.32
γ muurolene	0.26
α selinene	0.23
β bourbonene	0.14

Aldehydes 0.12%

α campholenal	0.12
myrtenal	0.17

Esters 0.25%

bornyl acetate	0.25
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Ketones 0.38%

verbenone	0.38
carvone	0.17
hashishene	0.27

Monoterpenols 3.04%

trans-verbenol	0.66
terpinenol	0.52
trans-pinocarveol	0.45
α phellandren-8-ol	0.33
α terpinenol	0.27
linalool	0.25
(E) sabinol	0.21
myrtenol	0.18
trans-carveol	0.17

Sesquiterpenols 0.4%

caryophyllene oxide	0.40
cubebol	0.29
viridiflorol	0.26

Other 0.29%

incensole	0.29
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Raw Material: resin

Botanical Name: *Boswellia carterii* var Birdwell

Production Method: Steam distillation

Certified Organic Frankincense (*Boswellia carterii*) Essential Oil

GC Analysis for Batch SO-59005

Retention time (mins)	Identified Compound	Mean % Peak Area
2.85	Hashishene	0.27
3.01	α -Thujene	1.16
3.13	α -Pinene	41.29
3.27	Camphene	0.75
3.36	Thujadiene	0.45
3.69*	β -Pinene	1.38
3.69*	Sabinene	6.07
4.03	Myrcene	7.38
4.16	α -Phellandrene	2.52
4.24	δ -Carene	0.45
4.48	para-Cymene	3.52
4.58*	Limonene	14.24
4.58*	β -Phellandrene	0.83
4.76	β -Ocimene	0.19
5.03	γ -Terpinene	0.32
5.49	Terpinolene	0.23
5.73	Linalool	0.25
6.04	α -Campholenal	0.12
6.23	trans-Pinocarveol	0.45
6.31	trans-Sabinol	0.21
6.37	trans-Verbenol	0.66
6.72	α -Phellandren-8-ol	0.33
6.86	Terpinenol	0.52
7.09*	Myrtenal	0.17
7.09*	α -Terpinenol	0.27
7.17	Myrtenol	0.18
7.30	Verbenone	0.38
7.53	trans-Carveol	0.17
7.84	Carvone	0.17
8.51	Bornyl acetate	0.25
9.80	α -Copaene	0.63
9.91	β -Bourbonene	0.14
10.05	β -Elemene	0.93
10.38	β -Caryophyllene	2.88
10.83	α -Humulene	0.55
11.18	γ -Muurolene	0.26
11.21	Germacrene D	0.43
11.27	β -Selinene	0.32
11.40	α -Selinene	0.23
11.66*	γ -Cadinene	0.32
11.66*	Cubebol	0.29
11.80	δ -Cadinene	0.57
12.49	Caryophyllene oxide	0.40
12.62	Viridiflorol	0.26
18.75	Incensole	0.29
	Total identified	93.68

*: Two or more compounds are co-eluting on this column

Compounds identified using multiple NIST databases and a custom defined spectral library.

DB-5

