



Gas Chromatography Analysis

Dear Customer,

Attached you will find the results of gas chromatographic analysis based on the information provided by our Producer/Laboratory for:

Sample Reference **2772**

We testify that the Chromatographic Analysis (GC) for the mentioned sample is identical with:

Product No.:	2772
Product Name:	Fir (Giant Fir) organic
Botanical Name:	Abies grandis
Batch No.:	1030501

Bühl, 2021-11-24

TR (min)	Constituents	%
6.07	SANTENE	0.05
6.51	TRICYCLEN	1.14
6.80	alpha-PINENE	8.64
	alpha-THUYENE	
7.53	alpha-FENCHENE	0.02
7.78	CAMPHENE	13.43
8.93	beta-PINENE	19.32
9.25	SABINENE	0.12
9.34	PINADIENE	0.03
10.22	delta3-CARENE	0.19
10.69	beta-MYRCENE	1.16
10.82	alpha-PHELLANDRENE	0.18
10.94	psi-LIMONENE	0.02
11.38	alpha-TERPINENE	0.11
12.24	LIMONENE	4.52
12.72	beta-PHELLANDRENE	14.52
14.29	gamma-TERPINENE	0.14
15.48	p-CYMENE	0.08
16.12	TERPINOLENE	0.59
19.63	SESQUITERPENE	0.03
20.14	1-HEXANOL	0.01
21.79	3-HEXEN-1-OL	0.04
22.53	FENCHONE	0.03
23.74	ESTER ALIPHATIQUE	0.01
23.82	CAPRYLATE D'ETHYLE	0.01
25.02	alpha-p-DIMETHYLSTYRENE	0.01
26.45	alpha-CUBEBENE	0.98
26.95	SESQUITERPENE	0.01
27.06	delta-ELEMENE	0.04
27.72	CITRONELLAL	0.11
27.91	YLANGENE	0.05
28.33	alpha-CAMPHOLENAL	0.02
28.54	alpha-COPAENE	0.63
29.57	CAMPHE	0.36
29.78	ESTER ALIPHATIQUE	0.02
31.31	SESQUITERPENE	0.22
31.51	alpha-PINOCAMPHONE	0.04
31.86	ARISTOLENE	0.05
32.64	CITRONNELLATE DE METHYLE	0.04
32.81	NEOISOPULEGOL	0.03
32.91	cis-ISOPULEGONE	0.08
33.78	ACETATE DE BORNYLE	19.65
34.21	beta-ELEMENE	0.06
34.36	SESQUITERPENE	0.13
34.58	beta-CARYOPHYLLENE	0.54
35.18	TERPINENE-4-OL	0.17
35.19	6,9-GUAIADIENE	0.10
35.93	COPACAMPHENE	0.02
36.15	SESQUITERPENE	0.01
36.49	MYRTENAL	0.05
36.78	CADINA-3,5-DIENE	0.60
37.24	GERMACRENE A	0.05

TR (min)	Constituants	%
37.73	ACETATE DE trans-PINOCARVYLE	0.03
37.95	trans-PINOCARVEOL	0.08
38.40	ZONARENE	0.68
38.75	ACETATE DE CITRONELLYLE	0.76
38.88	alpha-HUMULENE	0.11
39.02	E-beta-FARNESENE	0.10
39.22	gamma-SELINENE	0.16
39.42	SESQUITERPENE	0.04
39.57	SESQUITERPENE	0.03
40.04	gamma-MUROLENE	0.20
40.22	CALARENE	0.08
40.71	BORNEOL	0.45
40.85	alpha-TERPINEOL	0.54
41.16	SESQUITERPENE	0.02
41.30	SESQUITERPENE	0.06
41.64	GERMACRENE D	0.72
41.81	beta-SELINENE	0.47
42.21	alpha-SELINENE	0.27
42.30	alpha-MUROLENE	0.63
42.46	HIMACHALENE ISOMERE	0.08
42.66	beta-BISABOLENE	0.06
43.54	BICYCLOGERMACRENE	0.02
44.04	delta-CADINENE	3.27
44.16	ACETATE DE GERANYLE	0.69
44.57	gamma-CADINENE	0.03
44.77	CITRONELLOL	0.33
45.16	trans-alpha-BISABOLENE	0.05
45.30	SELINA-3,7-DIENE	0.04
45.57	CADINA-1,4-DIENE	0.32
45.96	MYRTENOL	0.04
46.11	SESQUITERPENE	0.02
47.73	SESQUITERPENE	0.01
48.02	GERMACRENE B	0.18
48.30	CALAMENENE	0.15
49.26	SESQUITERPENE	0.04
50.78	GERANIOL	0.01
51.75	Epi-CUBEBOL	0.09
53.30	alpha-CALACORENE	0.02
54.55	CUBEBOL	0.09
59.18	GLEENOL	0.03
59.62	NEROLIDOL	0.04
60.33	épi-CUBENOL	0.12
60.75	CUBENOL	0.28
65.60	SESQUITERPENOL	0.01
65.91	T-CADINOL	0.01
66.73	alpha-MUUROL	0.03
67.28	delta-CADINOL	0.02
68.86	SESQUITERPENOL	0.07
69.44	ESTER ALIPHATIQUE	0.02
70.45	ACETATE DE FARNESYLE	0.04
74.57	ESTER ALIPHATIQUE	0.01
	TOTAL	100.00