



CERTIFICATE of ANALYSIS (COA)

COMMON NAME	Pepper, Black - Organic
LATIN NAME	<i>Piper nigrum</i>
COUNTRY OF ORIGIN	Madagascar
CULTIVATION METHOD	Certified Organic (USDA, NOP)
TYPE	Essential Oil
EXTRACTION METHOD	Steam Distilled
PLANT PART	Dried Fruits
USE	Aromatherapy, Natural Perfumery

SKU	781
LOT #	10
MANUFACTURING DATE	October 2025
BEST BY DATE	October 2028

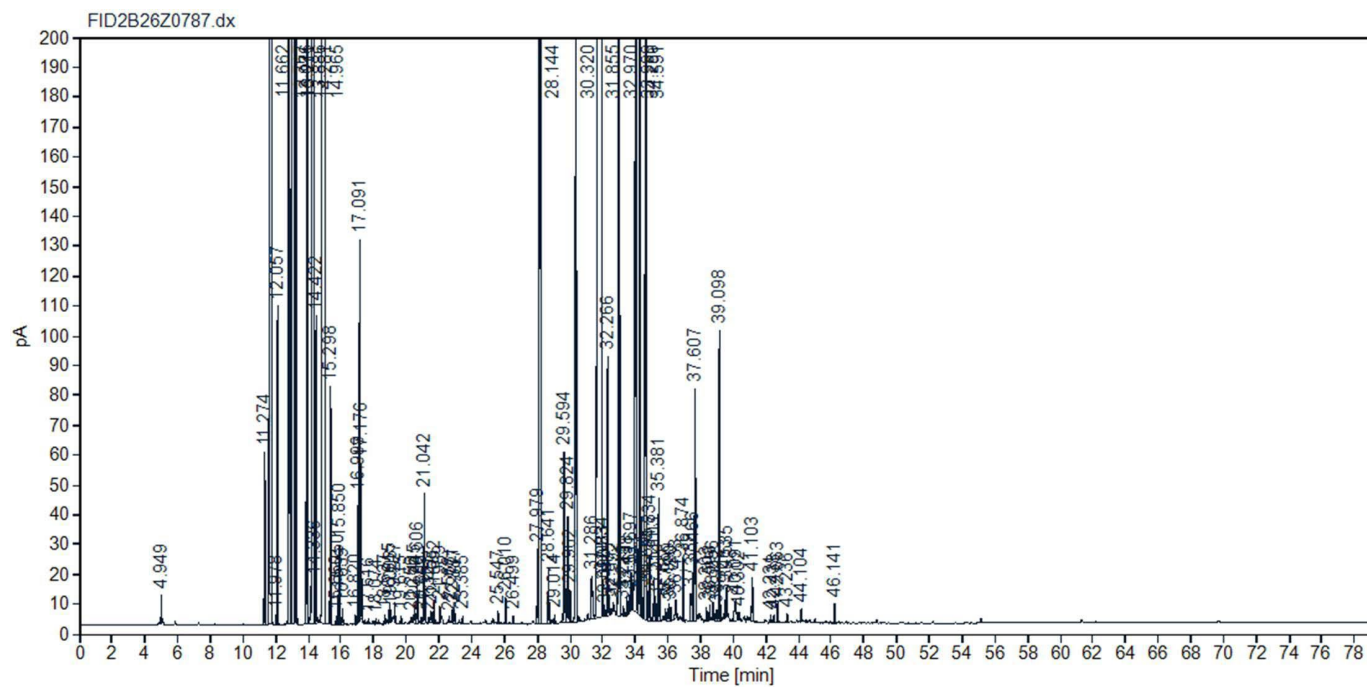
	SPECIFICATIONS (Range)	
SPECIFIC GRAVITY @20°C	0.864 – 0.884	0.896
REFRACTIVE INDEX @20°C	1.475 – 1.490	1.4829
OPTICAL ROTATION @20°C	-18° to +20°	na

PHYSICAL APPEARANCE	Transparent liquid	<i>Conforms</i>
COLOR	Colorless to pale yellow/green	<i>Conforms</i>
ODOR	Sharp, stimulating and spicy, the aroma of freshly ground pepper.	<i>Conforms</i>
SOLUBILITY	Soluble in alcohol and fixed oils	
SPECIAL USE INSTRUCTIONS	Dilute before use. Refrigerate to preserve freshness.	

PRIMARY CONSTITUENTS	Beta-caryophyllene, Limonene, Alpha-pinene.
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GCMS ANALYSIS

CHROMATOGRAPHY PROFILE



TR FID	Compound	ALLER.	IFRA 51	% GC/FID
4.949	ethyl alcohol			0,03
11.274	alpha thujene			0,26
	tricyclene			0,03
11.662	alpha pinene	*		13,12
11.978	alpha fenchene			0,01
12.057	camphene			0,36
12.767	sabinene			1,78
13.076	beta pinene	*		12,26
13.211	beta myrcene			2,13
13.886	alpha phellandrene			2,23
14.281	delta 3 carene			11,70
14.336	alpha terpinene	*		0,04
14.422	paracymene			0,38
14.965	limonene	*	**	18,02
	beta phellandrene			0,42
	eucalyptol			0,07
	cis beta ocimene			0,03
15.298	trans beta ocimene			0,27
15.850	gamma terpinene			0,09
16.039	trans sabinene hydrate			0,02
16.820	dehydroparacymene			0,02
16.999	isoterpinolene			0,16
17.091	terpinolene	*		0,47
17.176	linalool	*	**	0,18
18.627	cis-p-mentha-2,8-dien-1-ol			0,01
18.915	camphor	*		0,03
19.003	trans pinocarveol			0,01
20.445	paracymenol			0,03
20.606	4 terpinenol			0,06
21.042	alpha terpineol	*		0,18
21.321	myrtenol			0,01

TR FID	Compound	ALLER.	IFRA 51	% GC/FID
22.568	nerol			0,01
23.385	piperitone			0,01
26.499	methyl geranate			0,01
28.144	delta elemene			2,88
28.641	alpha cubebene			0,07
29.594	cyclosativene			0,33
29.824	alpha copaene			0,17
30.320	beta elemene			1,28
31.286	alpha gurjunene			0,12
31.855	beta caryophyllene	*		19,86
32.266	alpha guaiene			0,36
32.592	trans beta farnesene			0,01
32.970	alpha humulene			1,46
33.697	gamma muurolene			0,07
33.999	germacrene D			2,56
34.250	beta selinene			1,95
34.591	alpha selinene			1,67
34.834	beta bisabolene			0,15
35.103	gamma cadinene			0,07
35.214	calamenene			0,03
35.381	delta cadinene			0,20
35.787	cubenene			0,02
35.999	alpha calacorene			0,04
36.433	elemol			0,04
36.874	germacrene B			0,09
37.338	spathulenol			0,08
37.607	caryophyllene oxide			0,34
38.303	humulene oxide II			0,02
39.098	isospathulenol			0,46
41.103	eudesma-4(15),7-dien-1-beta-ol			0,08
	Total			98,81

This Essential Oil is a 100% pure and natural product. It does not contain any artificial ingredients or adulteration of any kind to the best of our knowledge. The analysis and statements herein constitute the most complete information available to Eden Botanicals. This product is guaranteed by Eden Botanicals to be of excellent quality.

Eden Botanicals

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