

# BIORUŽA, s. r. o.

Laborecká 1, 010 01 Žilina, IČO: 52234070, IČ DPH: SK2120953802, tel.: 00421 905 864 140, info@bioruza.sk

## CERTIFICATE of ANALYSIS (COA)

COMMON NAME	Angelica Essential Oil seed
LATIN NAME	<i>Angelica archangelica</i>
COUNTRY OF ORIGIN	Bulgaria
CULTIVATION METHOD	Certified Organic (USDA, NOP)
TYPE	Essential Oil
EXTRACTION METHOD	Steam Distillery
PLANT PART	seed
USE	Aromatherapy, Natural Perfumery.

	SPECIFICATIONS (Range)	
SPECIFIC GRAVITY @20°C	0.97 – 1.08	1.0369
REFRACTIVE INDEX @20°C	1.490 – 1.540	1.5041
OPTICAL ROTATION @20°C	<i>na</i>	<i>na</i>

PHYSICAL APPEARANCE	Transparent liquid	<i>Conforms</i>
COLOR	Yellow to brown	<i>Conforms</i>
ODOR	Fine, delicate aroma, peppery, green, slightly woody notes.	<i>Conforms</i>
SOLUBILITY	Soluble in alcohol and fixed oils	
SPECIAL USE INSTRUCTIONS	Dilute before use. Refrigerate to preserve freshness.	

PRIMARY CONSTITUENTS	Alpha-Pinene, Beta-Phellandrene, Osthol.
----------------------	--

QUANTITATIVE ANALYSIS OF THE EXTRACT:	Range %	%	CONTENT OF ESSENTIAL OIL	20-35 %	30.7
ANGELICIN	<i>na</i>	0.05	<b>RELATIVE COMPOSITION OF THE ESSENTIAL OIL:</b>	<b>Range %</b>	<b>%</b>
BERGAPTENE	<1.5 %	0.67	ALPHA-PINENE	<i>na</i>	11.6
OSTHOL	>5 %	12.8	ALPHA-PHELLANDRENE	<i>na</i>	22.9
METHOXSALENE	<i>na</i>	0.22	BETA-PHELLANDRENE	<i>na</i>	18.5
FALCARINOL	<i>na</i>	0.12	TRIDECANOLIDE	<i>na</i>	1.1
FALCARINDIOL	<i>na</i>	0.73	CYCLOPENTADECANOLIDE	<i>na</i>	1.3
TRIDECANOLIDE	<i>na</i>	0.26	OSTHOL	<i>na</i>	2.4
CYCLOPENTADECANOLIDE	<i>na</i>	0.46	12-OXABICYCLO[9.1.0]-DODECA-3,7 DIENE	<i>na</i>	0.30

\* EU Allergen