

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 Private Laboratory

SUBSTANCE IDENTIFICATION

Name: SPRUCE OIL (Abies Picea)
Productcode/Šifraproizvoda: 4224
INCI/INCI: PICEA ABIES LEAF OIL
CASNr./CASŠt.: 91770-69-3
EINECSNr.: 294-855-9
Batch: CO 01/2025
Production date: 06/ 2025
Expiration date: 06 /2030
Specification: Internal

GENERAL CHARACTERISTICS

Type of product: 100%Natural essential oil
Quality: Conventional product
Botanical name: Piceaabies (L.),Pinaceae
Type of production: Water steam distillation
Plant part: Needles
Country of origin: Austria

SENSORICALCHARACTERISTICS

Parameter	Specification requirements	Result
Appearance	Colourless to pale yellow liquid/	Complies
Odor	Characteristic	Complies

PHYSICALCHARACTERISTICS

Parameter	Specification requirements	Result
Specific density (20°C)	0.860-0.890	0.8712
Refractive index (20°C)	1.460-1.485	1.4756
Optical rotation (20°C)	-35°to-10°	-18.8°

PURITY

Parameter	Parameter	Result
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Fatty acids and resinified essential oils	Not present	Complies
Additives	Not present	Complies

CHEMICAL CHARACTERISTICS (GC-FID)

Parameter	Specification requirements	Result
Bornylacetate		1.9%
Camphene		4.6%
α Pinene		26.0%
Delta-3-Carene		4.3%
Myrcene		4.5%
Limonene		9.0%
β Phellandrene		5.4%
β Pinene		28.9%
β Caryophyllene		1.5%

PACKAGING AND STORAGE

Parameter	Requirements
Standard packaging	ALU, HDPE
Storage	In tight closed and full containers, at cool, dry and well ventilated place below 25°C
Reanalysis	When opened for more than 24 months quality should be checked before use.

ASSESSMENT

Quality conforms to the specification.

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