

Certificate of Analysis

Dill Seed CO₂-se extract, type no. 102.004

Carvone Type

batch no. 511401, lab no. 11823

raw material: *Anethum graveolens* - Seeds
origin: France
D/E - ratio: 34 - 38 kg raw material yield 1 kg product.

analytical results:

feature	method	limits	value	unit
Content of essential oil	21.006.01, Distillation	80 - 95	92,4	%
Volatile components: 100 % method, extract				
Limonene	GCMS, dill.met	40 - 50	40,7	%
Dihydrocarvone cis/trans	GCMS, dill.met	< 3	1,4	%
Carvone	GCMS, dill.met	45 - 65	55,6	%
Dillapiol	GCMS, dill.met	n.d.	n.d.	%
Refractive index (20°C)	Abbe-Refractometer	n.s.	1,4892	
Density (20°C)	21.024.02, Pycnometer	n.s.	0,9146	g/ cm ³

n.s. = not specified

n.d. = not detected

The product meets specification no. 16.255.01; date of analysis: 2011.11.07

The data in this report of analysis have been determined carefully and to the best of our knowledge. Depending on transport and storage conditions the indicated data can be subject to certain changes which are outside of our influence. Hence the report has not the meaning of a guaranty in the legal sense and does not dispense the customer from making his own quality control before using the product.