

Certificate of Analysis

Curcuma Longa CO2-to extract (organic), type no. 094.005 DE-ÖKO-013

batch no. Shmh181105, lab no. 28975

production: March 2020

retest: March 2025

raw material:

Curcuma longa - Rhizome, dried, from organic farming

country of origin of raw material: Nigeria

country of origin of product: Germany

D/E - ratio: 10 - 20 kg raw material yield 1 kg product.

Product contains:

no carriers and excipients



Sensory Check

feature	reference	result
Appearance:	Yellow - orange clear to slightly turbid liquid oil	meets
Odour:	typical smell	meets

Analytical Check

feature	method	limits	value unit
Content of essential oil	21.006.01, Distillation, gravimetric	70 - 90	79,9 % (g/ 100g)
Sum of Curcuminoides (calc. as Curcumin)	21.121.03, HPLC	< 0,5	0,16 %
Volatile components: extract, quantitative:			
ar-Turmerone	21.206.03, GCFID	n.s.	28,6 %
alpha-Turmerone	21.206.03, GCFID	n.s.	13,6 %
beta-Turmerone	21.206.03, GCFID	n.s.	15,3 %
Sum of Turmerones (ar-, alpha- und beta-T.), calc. as ar-Turmerone	21.206.03, GCFID	> 55	57,5 %
Content of water	21.220.01, Karl Fischer method	n.s.	0,7 %

n.s. = not specified

n.d. = not detected

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feature	method	limits	value unit
Refractive index (20°C)	21.080.03, Abbe-Refractometer	1,510 - 1,580	1,5142
Density (20°C)	21.024.03, Pycnometer	0,935 - 0,965	0,9564 g/cm ³
Aflatoxin B1	21.193.02, HPLC	EC No. 1881/2006	0,91 ppb
Total Aflatoxines B1,B2,G1,G2	21.193.02, HPLC	EC No. 1881/2006	6,2 ppb
Ochratoxin A	21.197.01, HPLC	EC No. 1881/2006	2,9 ppb
Pesticides	analysed by Eurofins Greenfield, US	USP/EP	meets
Benzo(a)pyrene	21.177.02, GCMS	< 10,0	meets (7,6) ppb
Sum of benzo(a)pyrene, benz(a)anthracene, benzo(b)fluoranthene and chrysene	21.177.02, GCMS	< 50,0	meets (32,9) ppb
Monitoring of substances*:			
1,8 Cineol	GCMS	n.s.	1,1 %
Camphor	GCMS	n.s.	n.d. %
Sum of Ethylene oxide and 2-Chlorethanol (expressed as Ethylene oxide)	GCMS, 21.270.01	0,1	n.d. (<0,001) ppm
		n.s. = not specified	n.d. = not detected

Additional information:

- 1) Drug / Extract Ratio: 18 - 25 / 1
- 2) Extraction Solvent: carbon dioxide
- 3) Excipients and Carriers: none
- 4) Arsenic < 5 ppm; Cadmium < 300 ppb; Lead < 5 ppm; Mercury < 200 ppb
- 5) Total Plate Count < 10000 CFU/g; Yeast & Mold < 1000 CFU/g; Salmonella, E. coli and S. aureus each negative/10 g
- 6) Gluten: LT 15 ppm
- 7) Food Allergens: not detectable
- 8) Non GMO Status: confirmed

*The pesticide analysis report from Eurofins US is available for batch 691217, which is analogously produced from the same raw material.

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The product meets the current version of the analytical (094.005_05_AS) and of the general (094.005_06_S) specification.

date of analysis: 2020.03.16

Digitally signed by Anja
Reason: Quality Control
Date: 2021.10.05 +02'00

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.