Nature's Gift

Balancing Body, Mind and Spirit with Pure Essential Oils Since 1995

316 Old Hickory Blvd East, Madison, TN 37115 Tel (615)612-4270 fax (615)860-9171 sold@naturesgift.com

www.naturesgift.com

Certificate of Analysis

Ginger Root CO2-to (organic) Batch # GE-59207

production: August 2020 retest: August 2023

raw material: Zingiber officinale Roscoe - Rhizome, dried, from organic

country of origin of raw material: Nigeria country of origin of product: Germany

D/E - ratio: 17 - 22 kg raw material yield 1 kg product.

Sensory Check

| feature | reference | result |
|----------------|---------------------------------------------|--------|
| Appearance: | clear, brown liquid oil | meets |
| Smell / Taste: | with pungent taste and characteristic smell | meets |

Analytical Check

| Analytical officer | | | | | | | |
|--------------------------------------------|--------------------------------------|--------------|-----------------|------------------|--|--|--|
| feature | method | limits | value | unit | | | |
| Content of essential oil | 21.006.01, Distillation, gravimetric | 30 - 50 | 39,5 | % (g/ 100g) | | | |
| Zingerone | 21.027.05, HPLC | <1 | 0,03 | % | | | |
| 6-Gingerol | 21.027.05, HPLC | 14 - 20 | 15,6 | | | | |
| 8-Gingerol | 21.027.05, HPLC | n.s. | 3,6 | | | | |
| 6-Shogaol | 21.027.05, HPLC | n.s. | 1,5 | % | | | |
| 10-Gingerol | 21.027.05, HPLC | n.s. | 5,2 | % | | | |
| 8-Shogaol | 21.027.05, HPLC | n.s. | 0,26 | | | | |
| 10-Shogaol | 21.027.05, HPLC | n.s. | 0,16 | % | | | |
| Sum of Gingerols | 21.027.05, HPLC | n.s. | 24,5 | % | | | |
| Sum of Shogaols | 21.027.05, HPLC | < 5 | 1,9 | | | | |
| Sum of pungent compounds | 21.027.05, HPLC | 24 - 35 | 26,4 | % | | | |
| Relative composition of the essential oil: | GCMS, 100 % Method | | | | | | |
| Neral/Geranial | GCMS, 21.225.01 | n.s. | 5,2 (1,8 + 3,4) | % | | | |
| ar-Curcumene | GCMS, 21.225.01 | n.s. | 5,9 | % | | | |
| alpha Zingiberene | GCMS, 21.225.01 | n.s. | 34,4 | | | | |
| alpha Farnesene | GCMS, 21.225.01 | n.s. | 9,1 | | | | |
| beta Bisabolene | GCMS, 21.225.01 | n.s. | 6,6 | | | | |
| Sesquiphellandrene | GCMS, 21.225.01 | n.s. | 13,5 | % | | | |
| | | n.s. = not s | pecified n.d | . = not detected | | | |



Balancing Body, Mind and Spirit with Pure Essential Oils Since 1995

www.naturesgift.com

316 Old Hickory Blvd East, Madison, TN 37115 Tel (615)612-4270 fax (615)860-9171 sold@naturesgift.com

Certificate of Analysis

Ginger Root CO2-to (organic) Batch # GE-59207

Analytical Check

| feature | method | limits | value unit |
|-------------------------------|----------------------------------|---------------------|------------------------------|
| Refractive index (20°C) | 21.080.03, Abbe-Refractometer | 1,500 - 1,520 | 1,5066 |
| Density (20°C) | 21.024.03, Pycnometer | 0,950 - 0,990 | 0,9711 g/cm ³ |
| Content of water | 21.220.01, Karl Fischer method | n.s. | 0,97 % |
| Aflatoxin B1 | 21.193.02, HPLC | EC No. 1881/2006 | meets (1,3) ppb |
| Total Aflatoxines B1,B2,G1,G2 | 21.193.02, HPLC | EC No. 1881/2006 | meets (2,7) ppb |
| Ochratoxin A | 21.197.01, HPLC | EC No. 1881/2006 | meets (0,36) ppb |
| Pesticides | | EC 396/2005 and BNN | meets |
| Monitoring of substances*: | | | |
| Methyleugenol | GCMS | n.s. | n.d. (< 0,01) % |
| | | n.s. = not si | pecified n.d. = not detected |

^{*}Substances to be monitored according to "Arrêté du Juin 2014" laying down the list of plants, authorized in food supplements

The product meets specifications no. 014.018_06_AS and 66.219.05; date of analysis: 2020.08.14

This computerized CoA has digital signature validated by Nature's Gift

Digitally signed by Anja Cawelius Reason: Quality Control Date: 2020.11.11 15:12:20 +01'00'

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.