

CERTIFICATE OF ANALYSIS (COA)

| Product Name | PALMAROSA ESSENTIAL OIL |
|----------------|------------------------------------|
| Botanical Name | Cymbopogon martinii |
| CAS # | 8014-19-5 ; 84649-81-0 |
| EINECS # | 294-453-3 ; 283-461-2 |
| INCI Name | Cymbopogon Martini (Palmarosa) Oil |

| Part Used | Leaves |
|---------------------|-------------------------------|
| Extraction Method | Steam Distilled Essential Oil |
| Quality | 100% Pure and Natural |
| Note Classification | Top to Middle Note |

| PROPERTIES | SPECIFICATIONS | <u>RESULT</u> |
|-------------------------|--------------------------------------------------------|---------------|
| Appearance | Pale yellow to light brown colored liquid | CONFORMS |
| Odour | Fresh, sweet-grassy, mild rosy aroma | CONFORMS |
| Refractive Index | 1.468 - 1.478 @ 20°C | 1.474 |
| Specific Gravity (g/mL) | 0.879 - 0.894 @ 20°C | 0.885 |
| Optical Rotation (°) | -3° to +6° | CONFORMS |
| Solubility | Soluble in alcohols and fixed oils; Insoluble in water | CONFORMS |

| MICROBIAL ANALYSIS | SPECIFICATIONS | STANDARDS | <u>RESULTS</u> |
|------------------------------|----------------|-----------|----------------|
| Aerobic Mesophilic Bacterial | | | |
| Count | < 100 CFU/g | ISO 21149 | CONFORMS |
| Yeast and Mould | < 10 CFU/g | ISO 16212 | CONFORMS |
| Candida albicans | ABSENT / 1g | ISO 18416 | CONFORMS |
| Escherichia coli | ABSENT / 1g | ISO 21150 | CONFORMS |
| Pseudomonas aeruginosa | ABSENT / 1g | ISO 22717 | CONFORMS |
| Staphylococcus aureus | ABSENT / 1g | ISO 22718 | CONFORMS |

| HEAVY METAL TESTS | SPECIFICATIONS | STANDARDS | <u>RESULTS</u> |
|----------------------------|----------------|-----------|----------------|
| Lead: Pb (mg/kg or ppm) | < 10 ppm | na | CONFORMS |
| Arsenic: As (mg/kg or ppm) | < 2 ppm | na | CONFORMS |
| Mercury: Hg (mg/kg or ppm) | < 1 ppm | na | CONFORMS |

Disclaimer & Caution: Please refer to all relevant technical information specific to the product, prior to use. The information contained in this document is obtained from current and reliable sources. INDO BIO ORGANICS provides the information contained herein, but makes no representation as to its comprehensiveness or accuracy. Individuals receiving this information must exercise their independent judgment in determining its appropriateness for a particular purpose. The user of the product is solely responsible for compliance with all laws and regulations applying to the use of the product, including intellectual property rights of third parties. As the ordinary or otherwise use(s) of this product is outside the control of INDO BIO ORGANICS, no representation or warranty - expressed or implied - is made as to the effect(s) of such use(s), (including damage or injury), or the results obtained. The liability of INDO BIO ORGANICS shall not be liable for any errors or delays in the content, or for any actions taken in reliance thereon. INDO BIO ORGANICS shall not be responsible for any damages resulting from the use of or reliance upon this information.