CAMDEN-GREY ESSENTIAL OILS
3579 NW 82 Avenue, Doral, FL 33122
Tel: 305-500-9630 / Fax: 305-500-9425
www.camdengrey.com

# CERTIFICATE OF ANALYSIS

| | | | |
|---|---|---|---|
| PRODUCT: | TUSC-SUNF-55 | | |
| CUSTOMER: | CAMDEN GREY ESSENTIAL OILS | | |
| LOT #: | 04911C | ORDER NUMBER: | SO0079875 |
| DATE: | 2/21/2011 | CUST ORD REF: | 2011-4513 |

| | | |
|---|---|---|
| FREE ACIDITY: | PASS | % ≤0.6 |
| HUMIDITY & INSOLUBLES: | PASS | % ≤0.2 |
| IMPURITIES: | PASS | % ≤0.05 |
| PEROXIDE INDEX: | PASS | meq $O_2$/Kg ≤5 |
| COLD TEST: | PASS | PASS/NOT PASS |

FLAVOR: BLAND

COLOR: YELLOW & CLEAR

## FATTY ACID COMPOSITION

| | | |
|---|---|---|
| MYRISTIC ($C_{14:0}$): | PASS | % ND-1.0 |
| PALMITIC ($C_{16:0}$): | PASS | % 4.0-5.5 |
| PALMITOLEIC ($C_{16:1}$): | PASS | % ND-0.05 |
| MARGARIC ($C_{17:0}$): | PASS | % ND-0.05 |
| MARGAROLEIC ($C_{17:1}$): | PASS | % ND-0.06 |
| STEARIC ($C_{18:0}$): | PASS | % 2.1-5.0 |
| OLEIC ($C_{18:1}$): | PASS | % 43.1-71.8 |
| LINOLEIC ($C_{18:2}$): | PASS | % 18.7-45.3 |
| LINOLENIC ($C_{18:3}$): | PASS | % ND-0.5 |
| ARACHIDIC ($C_{20:0}$): | PASS | % 0.2-0.4 |
| EICOSENOIC ($C_{20:1}$): | PASS | % 0.2-0.3 |
| BEHENIC ($C_{22:0}$): | PASS | % 0.6-1.1 |
| ERUCIC ($C_{22:1}$): | PASS | % ND |
| LIGNOCERIC ($C_{24:0}$): | PASS | % 0.3-0.4 |

## STEROLS COMPOSITION

| | | |
|---|---|---|
| CHOLESTEROL: | PASS | % 0.1-0.2 |
| BRASSICASTEROL: | PASS | % ≤0.1 |
| CAMPESTEROL: | PASS | % 9.1-9.6 |
| STIGMASTEROL: | PASS | % 9.0-9.3 |
| β-SITOSTEROL: | PASS | % 65.1-67.7 |
| Δ-7-STIGMASTENOL: | PASS | % 7.7-7.9 |
| TOTAL STEROLS: | PASS | p.p.m 1700-5200 |

Best if used within 18 months from lot number (production date)

MID-OLEIC SUNFLOWER OIL