

CERTIFICATE OF ANALYSIS FOR NIROLI ESSENTIAL OIL

Definition/Botanical Origin : The oil is obtained by steam distillation of the flowers of *Citrus aurantium L. ssp amara*

Scientific Name : *Citrus aurantium L. ssp amara*

Plant Family : Rutaceae

INCI name : Citrus aurantium amara Flower Oil

Synonyms : Citrus aurantium L. var. amara

CAS TSCA : 8016-38-4

CAS EINECS : 72968-50-4

EINECS : 277-143-2

FDA : 182.20

FEMA : 2271

Plant Parts Used : Flowers

Extraction Method : Steam Distillation

Application : Aromatherapy, skin care, perfume & flavors etc...

Country of Origin : Egypt

Organoleptic:

Odor : Powerful, sweet-terpeney, citrusy aroma

Colour and appearance : Pale yellow to amber

Physical Data:

Relative Density @ 20°C : 0.863 - 0.876 (typical 0.869)

Refractive Index @ 20°C : 1.464 - 1.474 (typical 1.472)

Optical Rotation @ 20°C : +1.0° to +14° (typical +4.5°)

Solubility : Insoluble in water, soluble in alcohol.

Flash Point : 55°

Storage : Store in a cool place in a closed container in or below 10°C

dark place

Shelf Life : 2 years under good storage condition.

GAS CHROMATOGRAPHIC ANALYSIS (by GC, FID):

	Chemical Constituents	%		Chemical Constituents	%
1	α-PINENE	0.29	10	NERYL ACETATE	1.84
2	β-PINENE	5.12	11	GERANYL ACETATE	3.48
3	β-MYRCENE	2.05	12	NEROL	1.20
4	LIMONENE	7.41	13	GERANIOL	3.27
5	Trans-β-OCIMENE	4.61	14	Trans-NEROLIDOL	3.45
6	LINALOOL	41.50	15	METHYL ANTHRANILATE	0.21
7	LINALYL ACETATE	16.50	16	Trans.trans-FARNESOL	1.70
8	β-caryophyllene	0.73	17	INDOLE	0.18
9	α-TERPINEOL	6.48			

Checked By:

Approved By:

AC- QCL