



Certificate of Analysis

Product Name:	Mandarin Essential Oil	Extraction Method:	Cold Pressed Essential Oil
Botanical Name:	<i>Citrus reticulata</i>	Quality:	100% Pure and Natural
Used Part:	Peels	Batch Number:	Varies
CAS No.:	8008-31-9; 84929-38-4	Manufacture Date:	Varies
INCI Name:	Citrus Reticulata (Mandarin) Peel oil	Best Before:	Varies

IDENTIFICATION		SPECIFICATION	STANDARDS	RESULT
Physical	Appearance	Pale yellow to reddish orange colored liquid	-	Complies
	Odour	Fresh, zesty, characteristic citrus-sweet aroma	-	Complies
	Refractive Index	1.465 - 1.485 20°C	-	1.472
	Specific Gravity (g/mL)	0.840 - 0.860 20°C	-	0.850
	Optical Rotation (°)	+63° to +78°	-	Complies
	Solubility	Soluble in alcohols and fixed oils; Insoluble in water	-	Complies
Chemical	Lead (Pb)	< 10 ppm	-	Complies
	Arsenic (As)	< 2 ppm	-	Complies
	Mercury (Hg)	< 1 ppm	-	Complies
Microbial	Aerobic Mesophilic Bacterial Count	< 100 cfu/g	ISO 21149	Complies
	Yeast & Mould	< 10 cfu/g	ISO 16212	Complies
	Candida albicans	Negative	ISO 18416	Complies
	Escherichia coli	Negative	ISO 21150	Complies
	P. aeruginosa	Negative	ISO 22717	Complies
	S. aureus	Negative	ISO 22718	Complies

Else	Storage Condition	Keep in a tightly closed container in a cool and dry place, protected from sunlight.
	Shelf Life	When stored for more than 24 months, quality should be checked before use.

