



## Technical Data Sheet

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

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

<b>Else</b>	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.

