Certificate of Analysis

Product: Mandarin Red Oil (USA) - 100% Organic ACO/USDA

Botanical Name: Citrus reticulata

Origin: USA

Plant part used: Fruit peel

Extraction method: Cold Press

Physical data	<u>Specification²</u>	<u>Result</u>
Appearance:	Clear, mobile liquid	Complies
Colour:	Orange to deep orange brown	Complies
Odour:	Characteristic mandarin citrus	Complies
Specific Gravity @ 20°C:	0.8450 to 0.8640	0.8511
Refractive Index @ 20°C:	1.4720 to 1.4780	1.4735
Optical Rotation:	$+63.00^{\circ}$ to $+98.00^{\circ}$	+93.500

Chromatographic Profile

Sample	Component	Specification ² Peak Area ¹ (%)	Result Peak Area¹(%)
Citrus reticulata	b-Myrcene	Trace to 5	1.85
	d-Limonene	73 to 98	95.44