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TROPICAL BIOESSENCE SDN. BHD.

CERTIFICATE OF ANALYSIS

Product : Sweet Orange Essential oil
Botanical name : Citrus sinensis Peel Oil (Origin South African)
Product Code : SOEO 01
Mfg Date : May 2025 Exp Date : May 2028 Batch no: 052545
Method : Cold-pressed

TEST	RESULT	STANDARD
Appearance	Light Yellow Colour to Orange	Confirm
Odour	Sweet, fresh, citrus	Confirm
Refractive index (25°C)	1.472	1.465 - 1.475
Specific gravity (25°C)	0.845	0.840 - 0.860
Optical Rotation	+97.0°	+94.0° - +99.0°
Solubility	Complies	Soluble in Alcohol
Heavy Metals Content		
Arsenic (mg/kg)	N.D (<0.1ppm)	BP 2013, Appendix IID, ICP-AES
Lead (mg/kg)	N.D (<0.5ppm)	BP 2013, Appendix IID, ICP-AES
Cadmium (mg/kg)	N.D (<0.1ppm)	BP 2013, Appendix IID, ICP-AES
Mercury (mg/kg)	N.D (<0.1ppm)	BP 2013, Appendix IID, ICP-AES
Microbial Content		
<i>Pseudomonas aeruginosa</i>	Absent in 1g	BP 2013, Appendix XVIB, 1
<i>Staphylococcus aureus</i>	Absent in 1g	BP 2013, Appendix XVIB, 1
<i>Total Combined Yeast and Mould</i>	ND(<10) CFU/g	BP 2013, Appendix XVIB, 2
<i>Total Aerobic Microbial Count</i>	ND(<10) CFU/g	BP 2013, Appendix XVIB, 2
Assay by GC		
Limonene	92.65%	85.0 - 95.0%
Linalool	1.30%	0-2.0%

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