

## TECHNICAL DATA SHEET (TDS)

Product Name	HOPS ESSENTIAL OIL
Botanical Name	Humulus lupulus
CAS #	8007-04-3 ; 8060-28-4
EINECS #	232-504-3
INCI Name	Humulus Lupulus (Hops) Oil

Part Used	Cones	
Extraction Method	Steam Distilled Essential Oil	
Quality	100% Pure and Natural	
Note Classification	Top to Middle Note	

PROPERTIES	SPECIFICATIONS	
Appearance	Colorless to greenish-yellow, slightly viscous liquid	
Odour	Woody, floral, herbaceous odour	
Refractive Index	1.470 - 1.494 @ 20°C	
Specific Gravity (g/mL)	0.825 - 0.926 @ 20°C	
Optical Rotation (°)	-2.5° to +2.5°	
Solubility	Soluble in alcohols and fixed oils; Insoluble in water	

MICROBIAL ANALYSIS	<b>SPECIFICATIONS</b>	STANDARDS
Aerobic Mesophilic Bacterial Count	< 100 CFU/g	ISO 21149
Yeast and Mould	< 10 CFU/g	ISO 16212
Candida albicans	ABSENT / 1g	ISO 18416
Escherichia coli	ABSENT / 1g	ISO 21150
Pseudomonas aeruginosa	ABSENT / 1g	ISO 22717
Staphylococcus aureus	ABSENT / 1g	ISO 22718

HEAVY METAL TESTS	SPECIFICATIONS	STANDARDS
Lead: Pb (mg/kg or ppm)	< 10 ppm	na
Arsenic: As (mg/kg or ppm)	< 2 ppm	na
Mercury: Hg (mg/kg or ppm)	< 1 ppm	na

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INDO BIO ORGANICS A-004, New Highway Park E-3 CHSL, Kandivali (E), Mumbai 400 101. Tel: +91 2870 1974 | 750689 1975 | Email: essentialoilsofindia@gmail.com | www.essentialoilsofindia.com