

TECHNICAL DATA SHEET (TDS)

Product Name	NEEM OIL
Botanical Name	Azadirachta indica
CAS #	8002-65-1 ; 90063-92-6
EINECS #	290-052-2
INCI Name	Melia Azadirachta (Neem) Seed Oil

Part Used	Seed
Extraction Method	Cold Pressed
Quality	100% Pure and Natural

<u>PROPERTIES</u>	<u>SPECIFICATIONS</u>
Appearance	Golden yellow to reddish brown colored liquid
Odour	Characteristic herbaceous, bitter odour
Refractive Index	1.461 - 1.471 @ 40°C
Specific Gravity (g/mL)	0.910 - 0.950 @ 20°C
Saponification Value (mgKOH/g)	175 - 205
Peroxide Value (meqO ₂ /kg)	Less than 20.0
Iodine Value (g I ₂ /100g)	65 - 80
Acid Value (mgKOH/g)	Less than 15.0
Moisture and Insoluble Impurities (%)	Maximum 0.3
Unsaponifiable Matter (%)	Maximum 2.0
Azadirachtin Content (ppm)	Greater than 1000
Solubility	Soluble in cosmetic esters and fixed oils; Insoluble in water

FREE ACID COMPOSITION

FATTY ACID	C-CHAIN	SPECIFICATIONS (%)
Palmitic Acid	C16:0	9.00 – 16.00
Stearic Acid	C18:0	5.00 – 12.00
Oleic Acid	C18:1 (n-9)	12.00 – 22.00
Linoleic Acid	C18:2 (n-6)	52.00 – 70.00
Arachidic Acid	C20:0	Maximum 5.0

MICROBIAL ANALYSIS	<u>SPECIFICATIONS</u>	<u>STANDARDS</u>
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

<u>HEAVY METAL TESTS</u>	<u>SPECIFICATIONS</u>	<u>STANDARDS</u>
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

Disclaimer & Caution: Please refer to all relevant technical information specific to the product, prior to use. The information contained in this document is obtained from current and reliable sources. INDO BIO ORGANICS provides the information contained herein, but makes no representation as to its comprehensiveness or accuracy. Individuals receiving this information must exercise their independent judgment in determining its appropriateness for a particular purpose. The user of the product is solely responsible for compliance with all laws and regulations applying to the use of the product, including intellectual property rights of third parties. As the ordinary or otherwise use(s) of this product is outside the control of INDO BIO ORGANICS, no representation or warranty - expressed or implied - is made as to the effect(s) of such use(s), (including damage or injury), or the results obtained. The liability of INDO BIO ORGANICS is limited to the value of the goods and does not include any consequential loss. INDO BIO ORGANICS shall not be liable for any errors or delays in the content, or for any actions taken in reliance thereon. INDO BIO ORGANICS shall not be responsible for any damages resulting from the use of or reliance upon this information.