

# Certificate of Analysis

## Product and Batch Information

<b>Product Name:</b>	Tongkat Ali Extract.	<b>Country of Origin:</b>	P.R. China
<b>Botanic Name:</b>	<i>Eurycoma longifolia</i>	<b>Active Ingredient:</b>	/
<b>Batch:</b>	VNIEL230306	<b>Manufacture Date</b>	Mar 06, 2023.
<b>Analysis Date</b>	Mar 06, 2023.	<b>Report Date</b>	Mar 10, 2023.
<b>Expiry Date</b>	Mar 05, 2026.		
<b>Item</b>	<b>Specification</b>	<b>Result</b>	<b>Test Method</b>

## Active Ingredieints

<b>Extract Ratio</b>	200:1	Complies	/
<b>Assay</b>	Eurycomanone>1.0%	1.10%	HPLC

## Physical Control

<b>Appearance</b>	Fine Powder	Complies	Visual
<b>Color</b>	Brown Yellow	Complies	Visual
<b>Taste</b>	Characteristic	Complies	Organoleptic
<b>Odor</b>	Characteristic	Complies	Organoleptic
<b>Sieve Analysis</b>	90% pass 80 mesh	Complies	80 Mesh Screen
<b>Ash</b>	5% Max	3.12%	2 g/525°C/ 5 hrs
<b>Loss on Drying</b>	5% Max	3.10%	5 g/105°C/ 2 hrs
<b>Part of Plant Used</b>	Root	Complies	/
<b>Solvent Extract</b>	Ethanol & Water	Complies	/
<b>Excipients</b>	5%-10% Maltodextrin	Complies	/

## Chemical Control

<b>Heavy metals</b>	NMT10ppm	Conforms	Atomic Absorption
<b>Arsenic (As)</b>	NMT 2ppm	Conforms	Atomic Absorption
<b>Mercury(Hg)</b>	NMT 1ppm	Conforms	Atomic Absorption
<b>Lead (Pb)</b>	NMT 2ppm	Conforms	Atomic Absorption
<b>GMO Status</b>	GMO Free	Conforms	/
<b>Pesticides Residues</b>	Meet USP Standard	Conforms	Gas Chromatography
<b>Benzo(a)pyrene</b>	NMT 10ppb	Conforms	GC-MS
<b>Sum of benzo(a)pyrene, benz(a)anthracene, benzo(b)fluoranthene and chrysene</b>	NMT 50ppb	Conforms	GC-MS

## Microbiological Control

<b>Total Plate Count</b>	10000cfu/g Max	Conforms	AOAC
<b>Yeast &amp; Mold</b>	300cfu/g Max	Conforms	AOAC
<b>S. aureus</b>	Negative	Negative	AOAC
<b>E.Coli</b>	Negative	Negative	AOAC
<b>Salmonella</b>	Negative	Negative	AOAC
<b>Pseudomonas aeruginosa</b>	Negative	Negative	USP

## Packing and Storage

<b>Packing</b>	Pack in paper-drums and two plastic-bags inside.
<b>Storage</b>	Store in a well-closed container away from moisture and direct sunlight.
<b>Shelf Life</b>	3 years if sealed and stored properly.