

## Tongkat Ali Extract – Technical Data Sheet (4:1)

INCI Name	Eurycoma Longifolia Root Extract
Botanical Source	Eurycoma longifolia – Root
Specification	4:1 Extract
Physical Form	Light brown to brown fine powder
Smell	Bitter, earthy characteristic odor
Solubility in Water	~5–10 g/L at 50–60 °C with stirring
Solubility in Oil	Practically insoluble
Recommended Solubilization Method	<ul> <li>Disperse in warm water (~50–60 °C)</li> <li>Stir thoroughly for 5–10 minutes</li> <li>Filter for clarity if necessary</li> </ul>
<b>Cosmetic Functions</b>	Toning, skin conditioning, energizing
Recommended Use Level	0.5–2% (in aqueous or emulsified systems)
Preservation/Handling	Keep sealed in cool, dry, and dark environment
Shelf Life	24 months in original packaging if stored properly
Toxicity Criteria	
NOAEL	200 mg/kg bw/day (oral, rat, aqueous root extract)
LD50	>2000 mg/kg bw (oral, rat)
Genotoxicity	No mutagenicity observed in standard toxicological evaluations