



Green Tea Extract – Technical Data Sheet (98% Polyphenols / 45% EGCG)

INCI Name	Camellia Sinensis Leaf Extract
Botanical Source	Camellia sinensis (L.) O. Ktze. – Leaf
Specification	98% Polyphenols (UV), 45% Epigallocatechin gallate (EGCG, HPLC)
Physical Form	Fine light green to brownish powder
Smell	Characteristic, slightly bitter herbal odor
Solubility in Water	~10–20 g/L at 45–60 °C with stirring
Solubility in Oil	Insoluble
Recommended Solubilization Method	<ul style="list-style-type: none">- Dissolve in warm deionized water (~50–60 °C)- Stir 5–10 minutes with gentle agitation- pH between 5 and 7 recommended for formulation stability
Cosmetic Functions	Antioxidant, skin conditioning, soothing
Recommended Use Level	0.2–2% (in water phase)
Preservation/Handling	Store in tightly closed container, dry, cool, and protected from light
Shelf Life	24 months unopened under proper storage conditions
Toxicity Criteria	
NOAEL	500 mg/kg bw/day (oral, rat, EGCG-rich extract)
LD50	>2000 mg/kg bw (oral, rat)
Genotoxicity	No genotoxicity observed in in vivo and in vitro studies