



Tomato Extract – Technical Data Sheet (10% Lycopene)

INCI Name	Solanum Lycopersicum Fruit Extract
Botanical Source	Lycopersicon esculentum Mill. – Fruit
Specification	10% Lycopene (HPLC)
Physical Form	Dark red to reddish-brown fine powder
Smell	Characteristic tomato-like odor
Solubility in Water	Low (<1 g/L at 50 °C), better in emulsified or oil-based systems
Solubility in Oil	Soluble in vegetable oils and lipophilic carriers
Recommended Solubilization Method	<ul style="list-style-type: none">- Disperse in oil or oil-based system (~40–50 °C)- Stir thoroughly for 5–10 minutes- Use emulsifiers for water-based formulations
Cosmetic Functions	Antioxidant, skin conditioning, anti-aging
Recommended Use Level	0.1–1% (in oil or emulsified phase)
Preservation/Handling	Store in tightly closed container, in a dry, cool and dark place
Shelf Life	24 months if unopened and stored properly
Toxicity Criteria	
NOAEL	500 mg/kg bw/day (oral, rat, lycopene extract)
LD50	>5000 mg/kg bw (oral, rat)
Genotoxicity	No genotoxic effects reported in standard toxicology studies