



ELEVATING BEAUTY THROUGH INNOVATION™



## **RAD-THICK™ 501** Product Data Sheet

Ellamera RAD-THICK 501 is a polymeric thickener that is soluble in low polarity liquid carriers and oils, such as Octyldodecanol, Isododecane and Squalane. The product enables excellent film forming and water repellency properties.

Depending on the desired effect, adding 3-8 percent to the oil is recommended.

Ellamera RAD-THICK 501 is manufactured in North America and supplied as an undusted white powder.

**INCI Designation:**  
hydrogenated styrene/isoprene copolymer



### FEATURES AND BENEFITS

- **Texture and Touch**
  - Customizable texture/skin feel
  - Spreadable
  - Film forming
  - Water resistant
- **Color**
  - Customizable color effects
  - High transparency enabling truer, deeper and bolder colors
  - High gloss

### POTENTIAL APPLICATIONS

- **Color Cosmetics**
  - Eye Shadow / Blush
  - Foundation / Concealer
- **Skincare**
  - Lotion and Serum
  - Face and Body Oils
- **Haircare**
  - Oil Treatment
  - Relaxer
- **Suncare**
  - Sunscreen / Block
  - Lotion / Spray / Stick

## PROCESSING RECOMMENDATIONS

A method is to pre-heat the oil to the desired mixing temperature. While stirring, gradually add the Ellamera product to the oil. Both high shear and low shear mixing devices can be used. High shear mixing devices help disaggregate the polymeric modifier into smaller particles which eases dissolution.

The Ellamera product is dissolved once the viscosity of the solution does not increase anymore. Upon cooling the gel is formed and further formulation is possible. Applying a vacuum during processing can help prevent encapsulation of air.

Property	Value*
Specific Gravity	0.88
Styrene/Rubber ratio	7/93
Color, Yellowness Index	≤4
Dissolution Temperature (°C)	70-100**

\*These are typical values and should not be used to set specifications.

\*\*Depends on the oil composition



Addition of Ellamera polymer to warm oil



Mixing under high or low shear



Gel formation upon cooling down

