

## PolyGel Emollient

### Specification Sheet

**Description:** Palm-free, plant-derived high-viscosity emollient ester made from naturally derived fatty acids that are uniquely linked together to form a stable oligomer. Offers enhanced stability properties, exceptional moisturization characteristics, and a light, satiny feel. Fully biodegradable. Dynamic viscosity 1,300 cp. Molecular weight 2,680g/mol.

**CAS:** 2361055-93-6

**INCI Name:** Acetyl ethylhexyl polyhydroxystearate

**Composition:** Acetyl ethylhexyl polyhydroxystearate

**Appearance:** Clear amber, viscous liquid, slightly sweet odor.

#### Benefits:

- Multi-functional, natural, eco-friendly emollient providing a non-oily, non-tacky, elegant skin feel.
- Has moisturizing, softening, and conditioning and unique lubricious effects. Can be used as silicone substitute.
- Delivers superior hydrating properties but with a dry feel and fast skin absorption.
- Acts as a thickening agent enhancing the consistency, viscosity, and volume of personal care products.
- Reduces coefficient of friction on hair providing sheen and moisture retention.
- Has superior oxidative stability.
- Is non-comedogenic.
- Improves the hydrolytic stability of the product over other naturally derived oils.
- Allows for high pigment loading and enhanced color intensity due to its polar nature.
- Boost UV protection due to its UV blocking properties.

**Use:** Typical use level 1-70%, add to oil phase of formulas or at the end of formula. May solidify in colder temps, revert by gentle warming. Do not heat over 50°C (125°F). For external use only.

**Applications:** Creams & lotions, baby care products, bath & shower products, color cosmetics, hair shampoo & conditioners, hair styling products.

**Solubility:** Insoluble in water. Dispersible in oils & fats.

**Preservation:** Preservative-free

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**Storage:** Store in a closed container in a dry place at room temperature.

**Country of Origin:** India

**Raw material source:** Fatty acids derived from various natural oils including, for example, castor oil.

**Manufacture:** Acetyl ethylhexyl polyhydroxystearate is produced by linking fatty acids together through estolide bond to form a unique oligomer (polymer).

**Animal Testing:** Not animal tested.

**GMO:** GMO-free

**Vegan:** Does not contain animal-derived components.

**HS Code:** 3208100000