

## Silicone Gel

### Specification Sheet

**Description:** Silicone gel is a non-emulsifying elastomer gel made of an organosiloxane polymer dispersed in cyclopentasiloxane. It is a semitransparent gel that functions as a thickener in formulations while delivering smooth applications. Creamy, semitransparent gel. Solids content 20%. Dynamic viscosity at 25 °C 125000 mPas. Insoluble in water, partly soluble in ethanol, glycerin, propylene glycol. Fully soluble in dimethicone, cyclopentasiloxane, isopropyl myristate, dicaprylyl ether, and ethylhexyl stearate.

**CAS:** 541-02-6, 556-67-2

**INCI Name:** Cyclopentasiloxane, dimethicone/vinyltrimethylsiloxysilicate crosspolymer

**Benefits:**

- Easily spreadable on skin and gives a nice, non-greasy, silky skin feel
- Thick emollient that adds viscosity and substance to creams
- Leaves a non-tacky film on the skin and improves water resistance of formulations
- Can be used as primer under makeup
- Allows easy incorporation of cosmetic ingredients like pigments
- Provides a substantive hydrophobic film making it ideal for use in sun care formulations

**Use:** Add to oil phase of formulas or after formulation is completed. Typical use level: 1-20% as emollient in emulsions. Can also be used pure directly on the skin. For external use only.

**Storage:** Store at room temperature. Viscosity may increase during storage, and agitation may be required before use if stored for an extended period of time.

**Applications:** Creams, lotions, sunscreen, makeup, lipsticks, hair care.

**Country of Origin:** USA

**Raw material source:** Dimethicone and dimethyldichlorosilane

**Manufacture:** In general, dimethicone crosspolymers are produced by crosslinking dimethicone polymeric chains via a hydrosilation reaction consisting of the addition of silicon hydride bonds (SiH) within the dimethicone polymer backbones across vinyl bonds within the selected crosslinking agent.

**Animal Testing:** Not animal tested

**GMO:** GMO free (does not contain plant-derived components)

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