



IncluSiGel™ 305 is a versatile, easy to use product that is a rheology modifier, thickener, and emulsifier. This product has compatibility with many cosmetic ingredients, is suitable for hot or cold emulsion and provides a rich after feel.

Typical Properties

Appearance	Off-white gel
Odor	Characteristic
pH (2% in water)	5.5-7.2
Viscosity	1.5k-4.5k cSt
Viscosity (2% in water)	60k-90k cSt
Viscosity (3% in water)	80k-130k cSt
Solids Content	45-49%

Benefits

- Emulsifies natural oils or silicones
- Suited for inverse emulsions
- Versatile in hot or cold emulsions
- Quick viscosity builder
- Effortless add-in incorporation
- Wide pH range (3.5-11)
- Soft and lubricious after feel
- Effective at low concentrations

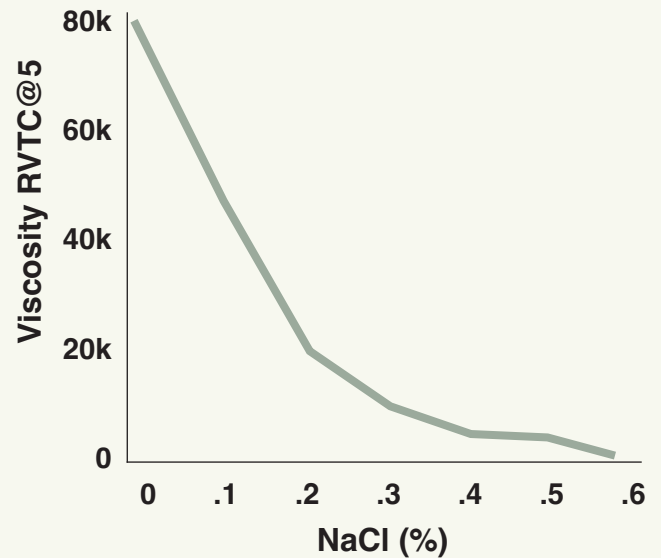
Recommended Uses

- Face moisturizers
- Body lotions
- Sunscreens
- Foundations
- Cleansing products
- Shampoos
- Hair conditioners
- Color cosmetics

Formulation Tips

- To use as emulsifier: use level 3-5%
- To use as thickener: use level 0.2-1%
- Can be used with other emulsifiers
- Ideal pH range 3.5-11
- Compatible with most ingredients but it is not compatible with anionic surfactants and salts
- Phenoxyethanol may affect the end product performance if it is used as the sole emulsifier

Viscosity of IncluSiGel™ 305



Light Moisturizing Body Lotion (Cold Process)

This light moisturizing body lotion is formulated using IncluSiGel™ 305 as the emulsifier without additional thickeners or rheology modifiers. This formula contains silicone oils exclusively in the oil phase proving that IncluSiGel™ 305 is an appropriate emulsifier for water-in-silicone emulsions. Also, viscosity can be regulated during manufacturing with procedure modifications creating a heavy cream or a liquid emulsion.

Ingredient	Wt%
Phase A	
IncluSiGel™ 305	5.00
SiBrid® DE-15 Diethicone	7.00
Fragrance	0.30
Phase B	
DI Water	q.s.
Glycerin	4.00
DL Panthenol	0.50
EDTA	0.10
Preservative	q.s.
Botanical Extracts	q.s.

Procedure

- Combine Phase A ingredient in main vessel and mix under propeller at RT until all uniform.
- Combine Phase B ingredients in secondary vessel and mix under propeller at RT until all uniform.
- In increments, add phase B to phase A. Allow complete incorporation before proceeding.
- If necessary, homogenize batch at the end for higher viscosity.