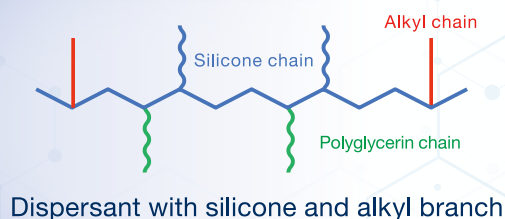


# KF-6115 NEW

## Polyglycerin Modified Silicone

### Structure Model



High dispersibility is exhibited in a formulation containing silicone fluids and hydrocarbon oils, UV absorbers, etc. together.

### Features

#### POINT 1

It has branched chains of silicone and alkyl, so it is soluble in a wide range of oils.

#### POINT 2

Stably uniform dispersion of powders in a hybrid oil phase of various oils  
Highly stable and transparent formulations are realized.

#### POINT 3

Highly effective in sunscreens and foundations containing silicone fluids and UV absorbers!

### General Properties

Grade	INCI	Viscosity 25°C, mm <sup>2</sup> /s	Specific gravity 25°C	HLB
KF-6115	LAURYL POLYGLYCERYL-3 POLYDIMETHYLSILOXYETHYL DIMETHICONE	1,000	0.945	Low

(Not specified values)

### Solubility in Various Oils and Fluids

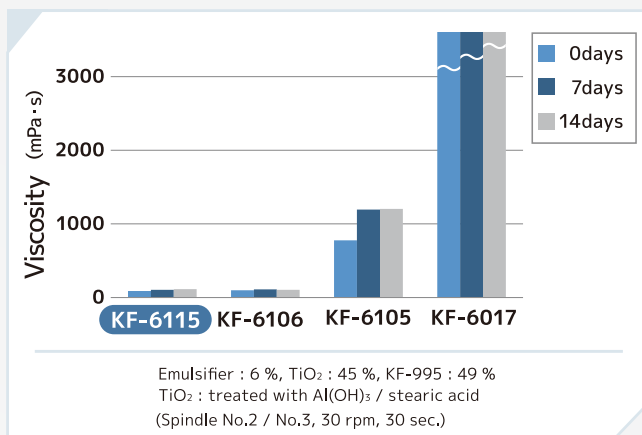
	Polyether Modified Silicone	Polyglycerin Modified Silicones				Silicone Acrylate
	KF-6017	KF-6104	KF-6105	KF-6106	KF-6115	KP-578
KF-995	S	S	S	S	S	S
KF-96A-6cs	S	S	S	S	S	S
KF-4422	S	S	S	S	S	S
Isododecane	S	S	S	S	S	S
Mineral Oil	D	D	S	D	S	D
Squalane	D	D	S	D	S	D
Triethylhexanoïn	S	D	S	D	S	S
Isotridecyl Isononanoate	D	S	S	S	S	S
Neopentyl Glycol Diethylhexanoate	S	S	S	S	S	S

S ... Soluble D ... Dispersion

(concentration 20 wt%, RT)

## Silicone Dispersant

### Dispersibility of Superfine Titanium Dioxide Viscosity of dispersions prepared with Bead-Mill



The left graph shows an example of dispersing a high concentration of superfine titanium oxide in silicone fluid using a bead mill.

When using KF-6115 and KF-6106, the dispersions become low-viscosity.

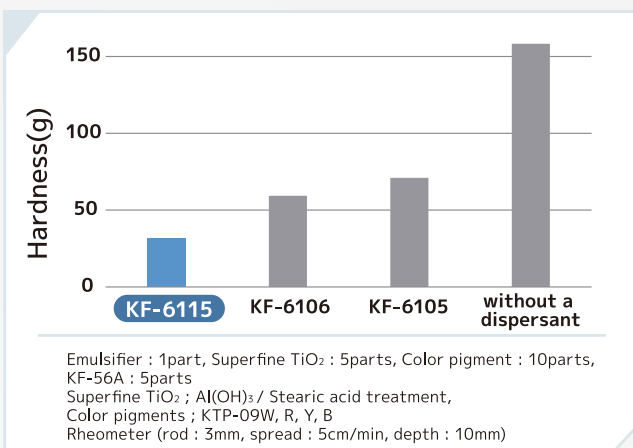
Further, they maintain low viscosity even with time;

The powders were well-dispersed and the preparations proved to be highly stable.

Since KF-6115 has silicone and alkyl branching, it is suitable for formulating various oils such as silicone oil, hydrocarbon oil, and ultraviolet absorber.

### Dispersibility of Superfine Titanium Dioxide/Color Pigments Hardness of powder pastes prepared with Roll-Mill

The right graph shows an example of dispersing superfine TiO<sub>2</sub> and iron oxides through a roll mill. Each paste includes phenyl modified silicone(KF-56A) as the base-oil and each dispersant. Paste with KF-6115 significantly reduces hardness compared to using other surfactants, making it easier to apply powders into formulations.



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