

SIL* 5193

INCI Name: PEG-12 Dimethicone

PERSONAL CARE INDUSTRY



Description

SIL 5193 is a graft style hydrolytically stable silicone polyether surfactant with a calculated HLB of 12.

Typical Applications

Suitable for a wide range of applications in personal care products including:

- Hair sprays and other leave in hair products
- Shampoos
- Skin care lotions
- Shaving soaps

Key Features

- Low usage levels
- Compatible with a wide range of cosmetic ingredients
- Foam builder, forms a dense stable foam
- Plasticizes hair styling resins
- Wetting agent
- Surface tension depressant

Benefits

- Imparts soft, silky feel to the hair
- Humectant, emollient in skin products

Typical Physical Properties

Property	Result
Appearance	Light yellow transparent liquid
Color (Gardner)	0-4
Viscosity (cSt, 25°C)	300
Specific Gravity (25/25 °C)	1.06
Cloud Point (°C)	95-100

Usage

- SIL5193 is soluble in water, alcohol and hydroalcoholic systems. It is stable in water systems. It can be added to heated mixtures up to 90°C.
- As ingredient in glass cleaners, SIL 5193 is suggested to begin evaluations at levels of 0.5 and 2.0 weight percent.
- Typical usage levels of SIL 5193 to obtain the desired effect in skin and hair care products.

Product Type	Desired Effect	Usage Level (%)
Hair Spray	Lustre/Detackification/Hold	0.1-1.0
Shampoo	Combing Ease/Manageability/Silky Feel	1.0-5.0
Pre-Shave Lotion	Emolliency	1.0-3.0
Aerosol Shaving Lather	Emolliency/Foam Stability/Wetting	0.2-2.0
Skin Lotions	Emolliency/Foam Stability/Wetting	0.1-2.0
Perfumes, Colognes	Wetting/Feel	0.1-0.5

Packing

25kg or 200kg drums

Storage

- SIL 5193 should be stored in closed containers.
- When stored at temperatures below 11°C, SIL5193 will become hazy and solidify to a soft wax. This effect is reversed upon heating and is common to silicone glycol copolymers. Repeated freeze thaw cycles have no effect on product performance.

Shelf Life

36 months