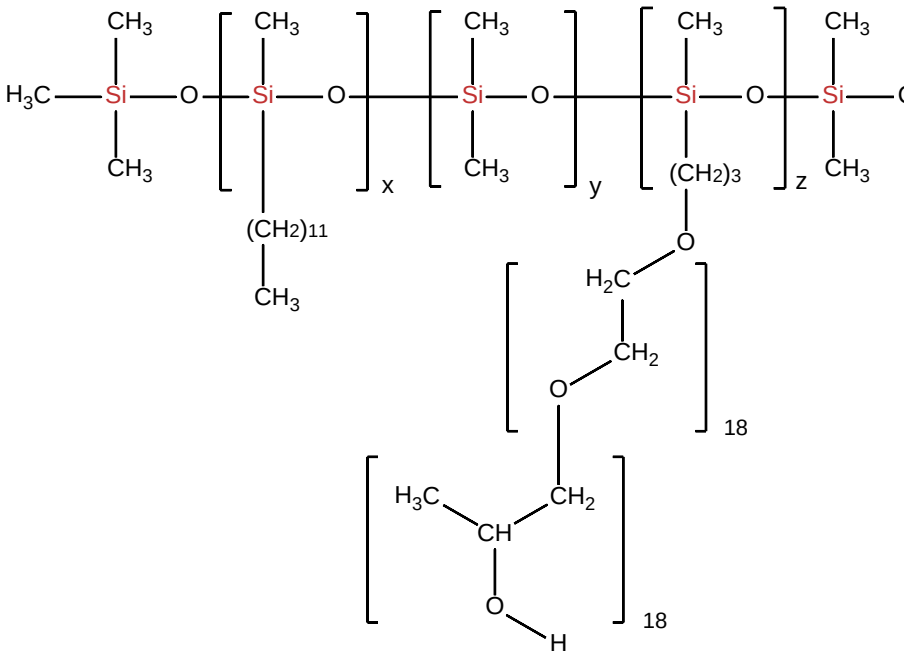
SiSiB® PC19520 Formulation Aids

INCI NAME

Lauroyl PEG/PPG-18/18 Dimethicone

CHEMICAL STRUCTURE



INTRODUCTION

SiSiB® PC19520 is a liquid alkylmethyl silicone polyether copolymer.

SiSiB® PC19520 is a very efficient emulsifier and leads to water-in-oil formulations exhibiting excellent stability at high water concentration and low emulsifier levels.

SiSiB® PC19520 can be used as a co-emulsifier in oil-in-water systems and has also demonstrated hair and skin conditioning properties.

ADVANTAGES

- Makes very stable W/O emulsions
- Cold manufacturing process
- Low emulsifier use level
- Formulation flexibility
- High water content
- Multiple (W/O/W) emulsions
- Water-in-wax emulsions
- Co-emulsifier for O/W emulsions

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- Moisturizing and protective
- Non-greasy feel
- Easy to spread
- Excellent wash off resistance
- Wide range of emulsion form: W/O/W, water-in-wax

PHYSICAL PROPERTIES

Appearance	Colorless to yellowish clear liquid
Specific gravity (25°C)	0.885-0.935
Viscosity (cSt, 25°C)	1000-4800
Refractive Index (25°C)	1.4430-1.4595

BENEFITS & APPLICATIONS

SiSiB® PC19520 emulsifier can be used to produce water-in-oil emulsions with excellent stability, flexibility and aesthetic.

SiSiB® PC19520 emulsifier can be used in many uses in skin care products such as:

Main emulsifier for water-in-oil creams and lotions: protective cream, cleansing lotion, night cream, sunscreen cream, baby cream, dry skin cream and lotion, moisturizing cream, foundation, hand and body cream and lotion.

Allows the preparation of multiple emulsions (water/oil/water, or W/O/W) and water in wax emulsions.

Co-emulsifier for oil-in water creams and lotions.

Skin conditioning properties in clear 2-in-1 shower gels.

SiSiB® PC19520 emulsifier can provide light hair conditioning when formulated into shampoos. It can even be used in clear shampoo formulations.

RECOMMENDED DOSAGE

Water-in-oil emulsions

The recommended use level is 2% for an oil phase ranging from 15 to 25%

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for low polarity oil (e.g. Mineral oil) and from 25 to 30% for medium polarity oil (e.g. Octyl palmitate). No heating is required to produce these water-in-oil creams unless high melting point ingredients are incorporated.

To ensure optimum stability of the final emulsion, the following procedures are recommended:

Stirrer and homogenizer

The water phase is added very slowly into the oil phase with high speed agitation. The final emulsion is then processed through the homogenizer.

Turbine type equipment

Turbine set to medium speed during the water addition. Turbine set to maximum speed to build the viscosity at the end. The emulsion viscosity can be increased by the addition of water, within the limits defined above or the viscosity can be decreased by increasing the oil phase volume (up to 35%) but the emulsifier level needs to be increased accordingly.

Suggest to add salts in the water phase for formulation stability.

Co-emulsifier for oil-in-water emulsions

SiSiB® PC19520 is an efficient co-emulsifier for oil-in-water emulsions at concentrations between 0.5 and 0.9%.

Skin and hair conditioning additive

SiSiB® PC19520 can be easily incorporated into clear shampoo and shower gels in the presence of fatty acid alkanolamides such as Coconut Diethanolamide or Monoisopropanolamide.

PACKING

SiSiB® PC19520 is available in 18Kg pail or 180Kg steel drum.

HANDLING

This document does not contain the product safety information required for safe use. Before handling, please refer to the product and safety data

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sheets, as well as container labels, for information on safe usage, physical hazards, and health risks. Safety Data Sheet is available on the website, from the distributor, or by contacting SiSiB customer service.

STORAGE

In the original unopened packaging, SiSiB® PC19520 has a shelf life of 24 months in a dry and cool place at room temperature.

LIMITATIONS

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

NOTE

All information in the leaflet is based on our present knowledge and experience. We reserve the right to make any changes according to technological progress or further developments. Performance of the product described herein should be verified by testing.

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