BELSIL® PF 200

Silicone Fluids, functional (INCI)

BELSIL® PF 200 is a multifunctional phenyl modified polydimethylsiloxane, the chemical structure of which has been carefully designed to provide multiple attractive benefits such as high refractive index, amphiphilicity, soft feel and easy emulsifiability.

INCI PEG/PPG-20/20 Phenylisopropyl Caprylyl Dimethicone

Properties

BELSIL® PF 200 comes with a clear advantage over conventional phenyl modified silicones currently available in the market in that it is compatible with wide varieties of polar and less polar solvents and is easily emulsifiable. Clear to translucent oil-in-water microemulsions can be made out of it, a feature that is usually not associated with standard phenyl silicones. BELSIL® PF 200 is also self-dispersible in water, and thus can be incorporated into the aqueous phase of a formulation if desired. It is an ideal phenyl silicone fluid for water-based formulations. Being an amphiphilic fluid, it is also compatible with many esters and oils, a feature that makes it attractive for oil based cosmetic formulations as well. At the same time, it has many attractive characteristics that phenyl silicones are associated with, such as high refractive index and pleasant feel.

Technical data

General Characteristics

Property	Condition	Value	Method
Appearance and color	-	slightly yellow liquid	-
Density	25 °C | 1013 hPa	approx. 1.02 g/cm^3	DIN 51757
Flash point	-	approx. 140 °C	ISO 2719
INCI name	-	PEG/PPG-20/20 Phenylisopropyl Caprylyl Dimethicone	-
Refraction index	-	1.458	-
Viscosity, kinematic	25 °C	approx. 450 mm^2/s	DIN 51562

These figures are only intended as a guide and should not be used in preparing specifications.

All the information provided is in accordance with the present state of our knowledge. Nonetheless, we disclaim any warranty or liability whatsoever and reserve the right, at any time, to effect technical alterations. The information provided, as well as the product's fitness for an intended application, should be checked by the buyer in preliminary trials. Contractual terms and conditions always take precedence. This disclaimer of warranty and liability also applies particularly in foreign countries with respect to third parties' rights.

Applications

- Skin Care
- Eye Make-up
- Make-up
- Hair Styling
- Shampoos
- Conditioners
- Make-up Foundation
- Sun Care
- Lip Make-up

Application details

In Hair Shine Spray and leave-on type Hair Styling applications, including clear to translucent water-based systems BELSIL® PF 200 imparts hair a shiny appearance and also provides a soft, pleasant feel. In shampoos and conditioners, BELSIL® PF 200 imparts gloss and softness to hair and also improves combing properties. Moreover, unlike standard phenyl fluids, water-clear shampoo formulations are possible with BELSIL® PF 200. In Lip Care and Color Cosmetics applications, BELSIL® PF 200 provides good gloss and boosts the brilliance of color. In Skin Care applications such as Facial Fluids, Body Creams, Body Lotions, etc., BELSIL® PF 200 provides nice glow and soft, pleasant sensory feel to skin. BELSIL® PF 200 can also be used as a secondary emulsifier in water-in-oil type formulations.

Processing:

Due to its low viscosity, BELSIL® PF 200 can be easily handled. It can be pumped to the formulation mixture and dispersed under ambient condition. Typical use level: 1-20%. The drop in viscosity in some aqueous formulations after addition of BELSIL® PF 200 can be corrected by adjusting the thickener system.

Packaging and storage

Storage

The 'Best use before end' date of each batch is shown on the product label.
Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons.

Safety notes

Comprehensive instructions are given in the corresponding Material Safety Data Sheets. They are available on request from WACKER subsidiaries or may be printed via WACKER web site http://www.wacker.com.

QR Code BELSIL® PF 200

For technical, quality or product safety questions, please contact:

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