

Silico® PC19826 Phenyl Trimethicone

Technical Data Sheet (TDS)

Product Identification

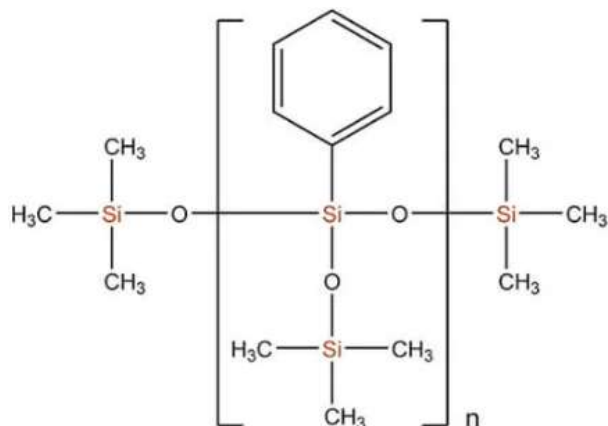
Silico® PC19826 Phenyl Silicone Fluid

High Refractive Index Silicone Fluid for Personal Care and Cosmetic Applications

CAS No.: 70131-69-0

Brand: Silico®

Chemical Structure



Product Description

Silico® PC19826 Phenyl Trimethicone is a phenyl-modified silicone fluid designed for use in advanced cosmetic and personal care formulations. The incorporation of phenyl functional groups into the polysiloxane backbone significantly increases the refractive index and enhances compatibility with a wide range of organic cosmetic ingredients.

This high-performance silicone fluid provides excellent gloss enhancement, superior spreadability, and a smooth, silky sensory profile on skin and hair. It forms a lightweight protective film that improves conditioning performance while maintaining a non-greasy feel.

Silico® PC19826 is particularly suitable for applications where high shine, enhanced aesthetics, and improved formulation stability are required.

Typical Physical & Technical Properties

Property	Description
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Product Name	Silico® PC19826
INCI Name	Phenyl Trimethicone
Chemical Type	Phenyl-Modified Polysiloxane
CAS Number	70131-69-0
Appearance	Clear, colorless to slightly yellow transparent liquid
Odor	Mild characteristic odor
Solubility	Insoluble in water; soluble in cosmetic oils and organic solvents

Key Performance Features

High Refractive Index

The presence of phenyl groups significantly increases the refractive index of the silicone fluid, delivering superior gloss and brilliance in hair care and color cosmetic formulations.

Excellent Sensory Properties

Provides a smooth, silky, and luxurious skin feel while improving spreadability and reducing tackiness in emulsions and anhydrous systems.

Improved Compatibility

Exhibits good compatibility with a broad range of cosmetic oils, esters, waxes, and organic ingredients, facilitating flexible formulation design.

Thermal and Oxidative Stability

Phenyl substitution improves resistance to heat and oxidation, supporting formulation stability in demanding processing and storage conditions.

Conditioning and Film Formation

Forms a thin, uniform film on skin and hair surfaces, enhancing softness, manageability, and moisture retention.

Typical Physical Properties

Property	Typical Value
Appearance	Clear transparent liquid
Viscosity (25°C)	15 – 30 cSt

Refractive Index (25°C)	1.455 – 1.463
Specific Gravity (25°C)	0.97 – 0.99
Flash Point	>100°C
Acid Value	≤0.1 mg KOH/g

These values are typical and are not intended for use as product specifications.

Applications

Silico® PC19826 Phenyl Trimethicone is widely used in personal care and cosmetic formulations where enhanced sensory performance and gloss are required.

Hair Care Products

- Hair serums
- Leave-in conditioners
- Styling products
- Shine sprays
- Anti-frizz treatments

Provides enhanced shine, improved combability, and a smooth conditioning effect.

Skin Care Formulations

- Moisturizing creams and lotions
- Anti-aging treatments
- Facial serums
- Sunscreen products

Improves spreadability and provides a soft, silky after-feel.

Color Cosmetics

- Foundations
- Lipsticks and lip gloss
- BB/CC creams
- Makeup primers

Enhances gloss, pigment dispersion, and overall aesthetic performance.

Personal Care

- Antiperspirants and deodorants
- Shaving preparations
- Sun care formulations

Recommended Use Levels

Application	Typical Dosage
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Hair care products	0.5 – 5%
Skin care formulations	0.5 – 3%
Color cosmetics	2 – 10%
Antiperspirants and deodorants	3 – 8%

Actual dosage levels may vary depending on formulation requirements and desired performance characteristics.

Formulation Guidelines

Silico® PC19826 can be incorporated into a wide range of cosmetic formulations.

- Recommended formulation approaches include:
- Addition to the oil phase of emulsions.
- Direct blending into anhydrous formulations.
- Compatible with silicone fluids, esters, hydrocarbons, and vegetable oils.
- Can be emulsified using standard cosmetic emulsifiers and conventional processing techniques.

Storage and Handling

Store in the original unopened container in a cool, dry, and well-ventilated environment. Avoid exposure to excessive heat and direct sunlight.

Keep containers tightly sealed to prevent contamination.

Shelf Life

When stored under recommended conditions, Silico® PC19826 has a shelf life of 24 months from the date of manufacture.

Packaging

Standard packaging options include:

- 20 kg pail
- 200 kg drum
- 1000 kg IBC container (available upon request)

Safety Information

Silico® PC19826 should be handled in accordance with standard industrial hygiene practices.

For detailed information on safety, handling, and regulatory compliance, please refer to the Safety Data Sheet (SDS).