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TECHNICAL DATA SHEET

Silwax® Sustain 5116

Cetyl Dimethicone

DESCRIPTION

Silwax® Sustain 5116 is a liquid alkylated silicone. **Silwax Sustain 5116** functions as a more sustainable version of the standard **Silwax® B116**. Relative to the standard, or “non-Sustain” version, the alkyl component of **Silwax Sustain 5116** is derived from biobased plant sources, rather than petroleum-based feedstocks. The total biobased carbon content for the product has been measured at >82%, per ASTM D6866. The INCI name for **Silwax Sustain 5116** is Cetyl Dimethicone.

TYPICAL PROPERTIES

Appearance	Clear Liquid
Viscosity	15 - 35
Active Content %	100
Colour, Gardner	3 Max
Solubility (1% and 10%): -Water -IPA -Mineral Oil -Cyclopentasiloxane (D5) -350 visc. Silicone Fluid	-Insoluble -Insoluble -Soluble -Soluble -Insoluble

USES AND APPLICATIONS

Silwax Sustain 5116 is a clear, low viscosity alkyl dimethicone suitable for incorporation into a variety of personal care applications. Alkyl pendant groups increase oil solubility and compatibility with organic systems. The product provides excellent spreadability, pleasing sensorial, gloss and emollience.

Sun Care

The low viscosity and alkyl functionality of **Silwax Sustain 5116** make it suitable for easy incorporation into sun care formulations, where it provides enhanced oil compatibility. Enhanced oil phase compatibility translates to a considerable surface tension reduction and an increase in spreadability. Low loadings (approx. 1%) of **Silwax Sustain 5116** have been shown to considerably reduce white-cast rub-out time for sunscreens using inorganic UV filters. Industry studies additionally indicate that the use of Cetyl Dimethicones in blended sunscreens, utilizing both organic and inorganic UV filters, may provide an SPF boost.

Skin Care

Silwax Sustain 5116 serves as an emollient and imparts barrier properties in skin care applications. A modest improvement in gloss and superior skin conditioning can also be achieved depending on the level of use. **Silwax Sustain 5116** improves the spreadability of all personal care products applied to the skin, including color cosmetics, lotions, creams, antiperspirants and deodorants.

The performance and functionality of **Silwax Sustain 5116** in personal care applications has been measured to be similar to standard Cetyl Dimethicone.

Recommended use level across all personal care applications is between 1.0 – 3.0 wt% of the formulation.

SAFETY

Before handling, read the Material Safety Data Sheet and container label for safe use, physical and health hazard information

STORAGE AND SHELF LIFE

When stored in the original, unopened containers between 10 and 40°C, **Silwax Sustain 5116** has a shelf life of 36 months from date of manufacture.

PACKAGING

Silwax Sustain 5116 is available in 18 Kg and 180 Kg containers.

LEGAL DISCLAIMER

Siltech Corporation believes that the information in this technical data sheet is an accurate description of the typical uses of the product. Siltech Corporation, however, disclaims any liability for incidental or consequential damages, which may result from the use of the product that are beyond its control. Therefore, it is the user’s responsibility to thoroughly test the product in their particular application to determine its performance, efficacy and safety. Nothing contained herein is to be considered as permission or a recommendation to infringe any patent or any other intellectual property right.

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