

## Product Information

### Personal Care

# Dow Corning<sup>®</sup> FZ-3196

## Volatile Alkyl Methyl Siloxane Fluid

### FEATURES

- Moderate volatility
- Compatible with a wide range of cosmetic ingredients
- Clear and colorless
- Low Viscosity and surface tension
- Lowers surface tension of organic oils
- Co-solubilizer between silicone oil and hydrocarbon oil
- Non flammable
- Non occlusive

### BENEFITS

- Excellent spreadability
- Unique light, smooth and less dry feel
- Superior cleansing with no residue
- Improved gloss and color intensity in lipsticks
- Easy to handle and to formulate
- Improve spreadability, reduce tackiness and greasy feel of vegetable oils

INCI NAME: Caprylyl Methicone

### APPLICATIONS

- Carrier for other ingredients
- Dispersing medium for hydrophobic powders and pigments.
- Can be used in a wide range of personal care applications such as:
- Skin care (e.g., moisturizers, gels, make-up removers, facial cleansers)
- Sun care
- Color cosmetics (e.g., lipsticks)
- Hair Care (e.g., leave-on treatments)
- AP / Deo

### TYPICAL PROPERTIES

Specification Writers: These values are not intended for use in preparing specifications. Please contact your local Dow Corning sales office or your Global Dow Corning Connection before writing specifications on this product.

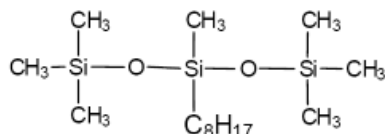
CTM*	Property	Unit	Value
0176	Appearance		Clear, colorless liquid
0001	Specific gravity		0.84
0208	Non-volatile content	%	0
0004	Viscosity at 25°C	mm <sup>2</sup> /s	2.9
0002	Refractive index at 25 °C		1.413
0006	Flash point - closed cup	°C	11 0
	Surface tension	mN/m	20.4

\* CTM:Corporate Test Method, copies of CTM's are available on request

### DESCRIPTION

Dow Corning<sup>®</sup> FZ-3196 is a caprylyl branched trisiloxane as described in Figure 1. The siloxane consists of three silicon atoms which is the shortest Dimethicone, and octyl group is attached on the middle silicon.

**Figure 1 Chemical formula for Dow Corning<sup>®</sup> FZ-3196**



### HOW TO USE

Dow Corning<sup>®</sup> FZ-3196 is added into the oil phase and mixed until solved or dispersed evenly. Due to the presence of the caprylyl group on the silicone backbone, this ingredient has good compatibility with a wide range of organic ingredients and pigments while maintaining very good spreading. This results into a less dry feel and richer feel when compared to volatile silicones but still very light due to the moderate volatility.

Being non flammable and very compatible, this material is easy to handle and to incorporate in a broad range of formulations including lipsticks and pigmented formulations. It can help to reduce white residues in formulations containing high level of volatile materials. Recommended use level is between 5 and 20 %.

## **HANDLING PRECAUTIONS**

Product safety information required for safe use is not included. Before handling, read product and safety data sheets and container labels for safe use, physical and health hazard information. The material safety data sheet is available on the Dow Corning website at [www.dowcorning.com](http://www.dowcorning.com). You can also obtain a copy from your local Dow Corning sales representative or Distributor or by calling your local Dow Corning Global Connection.

## **USABLE LIFE AND STORAGE**

When stored between 0 and 40°C (32°F and 104°F) in the original unopened containers, this product has a usable life of 21 months from the date of production.

## **PACKAGING**

These products are available in 15kg cans and 168 kg drums.

Samples are available in 100 ml bottles.

## **LIMITATIONS**

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

## **HEALTH AND ENVIRONMENTAL INFORMATION**

To support Customers in their product safety needs, Dow Corning has an extensive Product Stewardship organization and a team of Product Safety and Regulatory Compliance (PS&RC) specialists available in each area.

For further information, please see our website, [www.dowcorning.com](http://www.dowcorning.com) or consult your local Dow Corning representative.

## **LIMITED WARRANTY INFORMATION - PLEASE READ CAREFULLY**

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that our products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

Dow Corning's sole warranty is that our products will meet the sales specifications in effect at the time of shipment.

Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

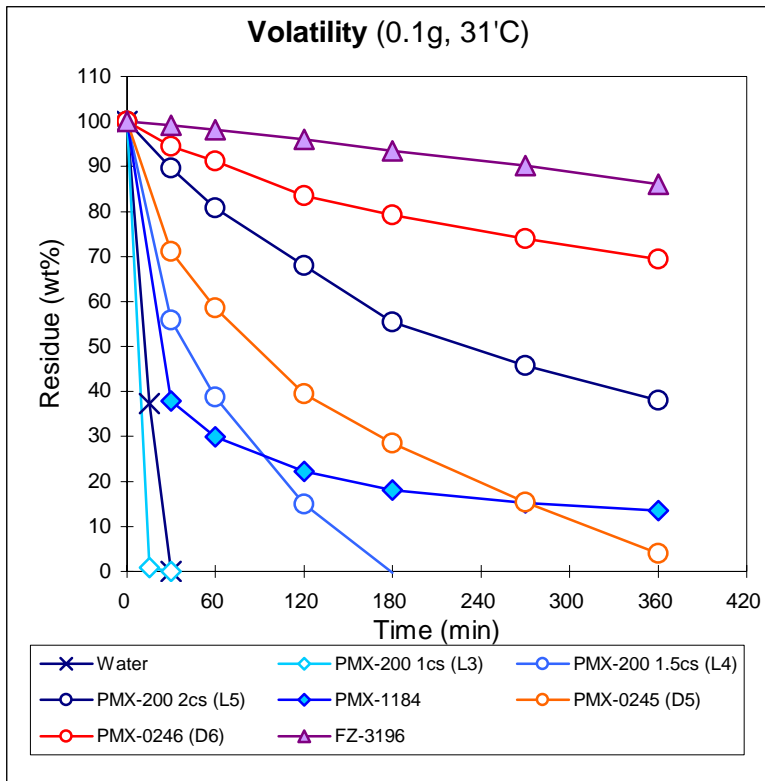
**DOW CORNING  
SPECIFICALLY DISCLAIMS  
ANY OTHER EXPRESS OR  
IMPLIED WARRANTY OF  
FITNESS FOR A PARTICULAR  
PURPOSE OR  
MERCHANTABILITY.**

**DOW CORNING DISCLAIMS  
LIABILITY FOR ANY  
INCIDENTAL OR  
CONSEQUENTIAL DAMAGES.**

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**[dowcorning.com](http://dowcorning.com)**

**Volatility:**



**Compatibility:**

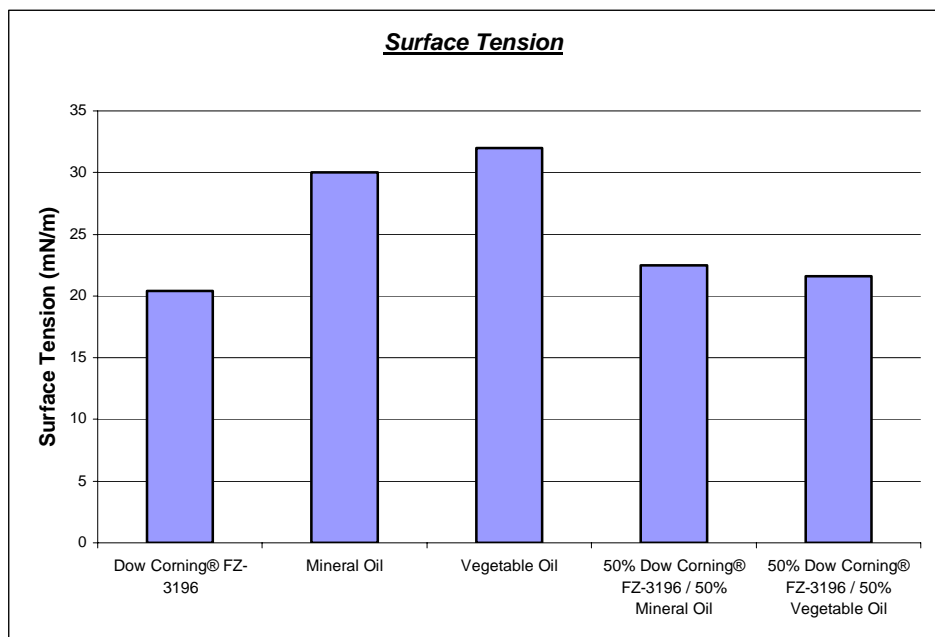
Cosmetic Ingredients (INCI)	Dow Corning® FZ-3196		
	1:9	5:5	9:1
<b>Esters:</b>			
ISONONYL ISONONANOATE	C	C	C
CETYL ETHYLHEXANOATE	C	C	C
ISOPROPYL MYRISTATE	C	C	C
PENTAERYTHRITYL TETRAISOSTEARATE	C	C	C
C12-15 ALKYL BENZOATE	C	C	C
ISOPROPYL PALMITATE	C	C	C
OCTYLPALMITATE	C	C	C
<b>Glycerides:</b>			
TRIETHYLHEXANOIN	C	C	C
CAPRYLIC/CAPRIC TRIGLYCERIDE	C	C	C
POLYGLYCERYL-2 TRIISOSTEARATE	C	C	C
<b>Fatty Alcohols/Acids:</b>			
STEARYL ALCOHOL	C	NC	NC
ISOSTEARYL ALCOHOL	C	C	C
OLEYL ALCOHOL	C	C	C
STEARIC ACID	C	C	C
LAURYL ALCOHOL	C	C	C
OCTYLDODECANOL	C	C	C

<b>Hydrocarbons:</b>			
MINERAL OIL	C	C	C
HYDROGENATED POLYISOBUTENE	C	C	C
ISODODECANE	C	C	C
ISOHEXADECANE	C	C	C
ISOPARAFFIN	C	C	C
PETROLATUM	C	C	NC
<b>Vegetable Oils:</b>			
SIMMONDSIA CHINENSIS (JOJOBA) SEED OIL	C	C	C
OLEA EUROPAEA (OLIVE) FRUIT OIL	C	C	C
LANOLIN OIL	C	C	C
ALMOND OIL	C	C	C
CASTOR OIL	C	NC	NC
COCONUT OIL	C	C	C
CORN OIL	C	C	C
PALM OIL	C	C	C
SESAME OIL	C	C	C
SOYBEAN OIL	C	C	C
SUNFLOWER OIL	C	C	C
<b>Miscellaneous:</b>			
BEESWAX	C	C	C
EUPHORBIA CERIFERA (CANDELILLA) WAX	NC	NC	C
LANOLIN	C	C	C
<b>Sunscreen Actives:</b>			
ETHYLHEXYL METHOXYCINNAMATE	C	C	C
<b>Hydrophilics:</b>			
WATER	NC	NC	NC
ALCOHOL	C	C	C
ISOPROPYL ALCOHOL	C	C	C
GLYCERIN	NC	NC	NC
PROPYLENE GLYCOL	NC	NC	NC
BUTYLENE GLYCOL	NC	NC	NC
<b>Dow Corning® Materials:</b>			
<i>Dow Corning®</i> 556 Cosmetic Grade Fluid	C	C	C
<i>Dow Corning®</i> 1501 Fluid	C	C	C
<i>Dow Corning®</i> 1503 Fluid	C	C	C
<i>Dow Corning®</i> 749 Fluid	C	C	C
<i>Dow Corning®</i> 9040 Silicone Elastomer Blend	C	C	C
<b>XIAMETER® Materials:</b>			
XIAMETER® PMX-200 Silicone Fluid 5 cSt	C	C	C
XIAMETER® PMX-200 Silicone Fluid 350 cSt	C	C	C
XIAMETER® PMX-0245 Cyclopentasiloxane	C	C	C

C=Compatible and NC= Non Compatible

Blend ratio is described in weight ratio as Silicone: Cosmetic Ingredients.

## Reduction of surface tension of mineral and vegetable oils (50/50 blend):



## Spreadability measurements

