

XIAMETER[®] OFX-0193 Fluid

INCI Name: PEG-12 Dimethicone

FEATURES

- Low usage levels
- Compatible with a wide range of cosmetic ingredients
- Foam builder; forms a dense, stable foam
- Plasticizes hair styling resins
- Wetting agent
- Surface tension depressant

BENEFITS

- Imparts soft, silky feel to the hair
- Humectant, emollient in skin products

APPLICATIONS

Suitable for a wide range of applications in personal care products including:

- Hair sprays and other leave in hair products
- Shampoos
- Skin care lotions
- Shaving soaps

Suitable for a wide range of applications in automotive and household cleaning products including:

- As anti-fog agent in glass cleaners

TYPICAL PROPERTIES

Specification Writers: These values are not intended for use in preparing specifications. Please contact your local XIAMETER[®] sales representative prior to writing specifications on this product.

Test	Unit	Value
Appearance		Clear to hazy liquid, light amber color, no significant particulate
Color	Gardner	0-4
Viscosity at 25°C	cSt	260
Specific Gravity at 25°C (77°F)		1.07
Cloud Point	°C	95-100

DESCRIPTION

XIAMETER[®] OFX-0193 Fluid is a silicone polyether copolymer (see Figure 1 for chemical formula).

XIAMETER OFX-0193 Fluid is a graft style hydrolytically stable silicone polyether surfactant with a calculated HLB of 12 (calculated by utilizing the wt% of EO/5 method).

HOW TO USE

XIAMETER OFX-0193 Fluid is soluble in water, alcohol and hydroalcoholic systems. It is stable in water systems. It can be added to heated mixtures up to 90°C (194°F).

As ingredient in glass cleaners XIAMETER OFX-0193 Fluid is suggested to begin evaluations at levels of 0.5 and 2.0 weight percent.

PRODUCT SAFETY INFORMATION

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND MATERIAL SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL, ENVIRONMENTAL, AND HEALTH HAZARD INFORMATION. THE MATERIAL SAFETY DATA SHEET IS AVAILABLE ON THE XIAMETER WEB SITE AT WWW.XIAMETER.COM.

STORAGE

Product should be stored at or below 25°C (77°F) in original, unopened containers. The most up-to-date shelf life information can be found on the XIAMETER Web site in the Product Detail page under Sales Specification.

When stored at temperatures below 11°C (52°F) XIAMETER OFX-0193 Fluid will become hazy and solidify to a soft wax. This effect is reversed upon heating and is common to silicone glycol copolymers. Repeated freeze thaw cycles have no effect on product performance.

LIMITATIONS

This product is neither tested nor represented as suitable for medical or pharmaceutical uses. Not intended for human injection. Not intended for food use.

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.

Figure 1: Chemical formula for XIAMETER OFX-0193 Fluid.

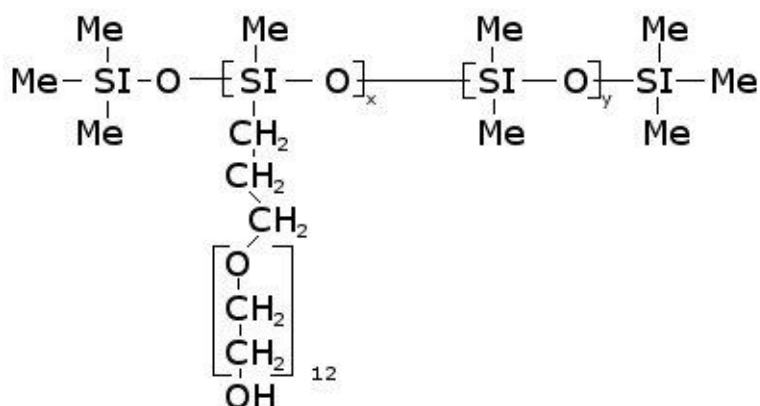


Table 1: Typical usage levels of XIAMETER OFX-0193 Fluid to obtain the desired effect in skin and hair care products.

Product Type	Desired Effect	Usage Level %
Hair Spray	Lustre/Detackification/Hold	0.1-1.0
Shampoo	Combing Ease/Manageability/Silky Feel	1.0-5.0
Pre-Shave Lotion	Emolliency	1.0-3.0
Aerosol Shaving Lather	Emolliency/Foam Stability/Wetting	0.2-2.0
Skin Lotions	Emolliency/Lubricity/Wetting	0.1-2.0
Perfumes, Colognes	Wetting/Feel	0.1-0.5

Table 2: Surface tension comparison with XIAMETER OFX-0193 Fluid.

Distilled Water, mN m ⁻¹	72.8
XIAMETER OFX-0193 Fluid , 1% Solution, mN m ⁻¹	26-28

Table 3: Foam building ability with XIAMETER OFX-0193 Fluid.

Surfactant System, 3% XIAMETER OFX-0193 Fluid	
Initial Height of Foam, mm	0
Final Height, After 8 minutes, mm	50.8

Table 4: Compatibility of XIAMETER OFX-0193 Fluid with various cosmetic ingredients.

Type of Material	Compatibility
Water	C
Ethanol (70%)	C
Stearyl alcohol	C
Beeswax	I
Glycerol	I
IPM	C
Lanolin	I
Mineral Oil	I
Paraffin Wax	I
Stearic Acid	C
Dimethicone, 350 cS	I

At Room Temperature

C=Compatible, I=Completely or partially immiscible