

Technical Data Sheet

XIAMETER™ OFX-8800 Fluid

Novel organofunctional silicone

Features & Benefits

- Provides premium softness
- Provides excellent hydrophilicity
- Contains nearly 100% actives
- Contains virtually no solvents or VOCs
- Provides high whiteness retention
- Low viscosity
- Makes shear-stable emulsions
- Makes high-pH-stable emulsions
- Compatible with stain-release finishing
- Exhaustible

Applications

- Hydrophilic textile finishes
- Specialty textile finishing
- Softeners for stain release finishing systems

Typical Properties

Specification Writers: These values are not intended for use in preparing specifications.

Property	Unit	Result
Appearance		Hazy to clear straw fluid
Viscosity at 25°C (77°F)	cSt	1,500

Description

XIAMETER™ OFX-8800 Fluid is a novel organofunctional silicone copolymer designed for the formulation of premium textile finishes. XIAMETER OFX-8800 Fluid offers an excellent balance of performance attributes ideal for today's demanding textile finishing applications that require multifunctional benefits. In addition, XIAMETER OFX-8800 Fluid is contains virtually no solvents or volatile organic compounds (VOCs) which makes it more environmentally sound and safer to use.

When applied to textile substrates XIAMETER OFX-8800 Fluid imparts premium hand while virtually maintaining the original substrate whiteness. Most importantly, XIAMETER OFX-8800 Fluid maintains the natural absorbency of cellulosic substrates and their blends, and imparts hydrophilicity to most synthetic substrates. The hydrophilic properties imparted show practically no change with fabric aging or extreme drying conditions.

Description (Cont.)

When properly formulated, emulsions based on XIAMETER OFX-8800 Fluid show excellent stability to high shear and to a broad pH range (up to pH 12) as well as very good compatibility and stability in baths containing common textile chemicals such as optical brighteners and residual electrolytes.

In addition, emulsions made using XIAMETER OFX-8800 Fluid show very good compatibility with stain release finishing systems, specifically those based on fluorochemicals, imparting very good softness with minimum to no impact on the stain release and oil repellency properties these provide.

How To Use

XIAMETER OFX-8800 Fluid is a low viscosity silicone fluid that makes it easy to handle and formulate. Stable emulsions of XIAMETER OFX-8800 Fluid can be prepared using commonly available emulsifiers. A starting formulation and emulsification procedure are shown below, although other emulsification systems have also been shown to be effective as well. Please contact your local technical representative for additional information.

Suggested Starting Formulation

Product	%
XIAMETER™ OFX-8800 Fluid	20.0
Acetic Acid (glacial)	0.3
Tridecyl alcohol ethoxylate, 6EO	9.0
Tridecyl alcohol ethoxylate, 9EO	3.0
Water 1	5.0
Water 2	5.0-7.0
Water 3	30.0
Water 4	Balance
KATHON™ LX 1.5%	0.02

Method

- 1. Add XIAMETER OFX-8800 Fluid and acetic acid; mix 30 minutes.
- 2. Add emulsifier; mix 15 minutes.
- 3. Add first water; mix 30 minutes. Thorough mixing is required from this stage forward.
- 4. Add second water: mix 1 hour.
- 5. Add third water: mix 30 minutes.
- 6. Add last water and biocide; mix 30 minutes or until a uniform product is achieved.
- 7. Filter and drum off.

Note: Sample formulations are provided for illustrative purposes only. Dow does not warrant their merchantability, fitness for use, performance, efficacy, safety, or freedom from patent infringement. They are not commercial formulations and they have not been subject to extensive testing. It is your responsibility to thoroughly test any formulation before use.

Application

Recommended application level is 0.5–1.0% XIAMETER OFX-8800 Fluid polymer on weight of fabric (owf) for conventional finishing applications. Emulsions based on XIAMETER OFX-8800 Fluid are slightly cationic and suitable for application by padding and/or exhaustion.

In stain release applications, the same amount of silicone solids owf as that of the fluorochemical solids is recommended as a starting point.

Handling Precautions

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE SAFETY DATA SHEET IS AVAILABLE ON THE DOW WEBSITE AT WWW.CONSUMER.DOW.COM, OR FROM YOUR DOW SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CUSTOMER SERVICE.

Usable Life And Storage

Product should be stored at or below 32°C (90°F) in original, unopened containers.

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.

Health And Environmental Information

To support customers in their product safety needs, Dow has an extensive Product Stewardship organization and a team of product safety and regulatory compliance specialists available in each area.

For further information, please see our website, www.consumer.dow.com or consult your local Dow representative.

http://www.xiameter.com

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