



Technical Data Sheet

XIAMETER™ OFX-8468 Fluid

Aminofunctional silicone polymer

Features & Benefits

- Soft, greasy feel
- Durable
- Low yellowing
- Easy-to-make microemulsion
- Imparts premium handle on certain fabrics even at low-temperature cure (< 100°C [212°F])

Applications

- Suitable for formulation into a microemulsion that can be applied by padding or exhaustion. (In the case of exhaustion on jet machines, customers should satisfy themselves with the shear stability of the emulsion prior to use.)
- The emulsion prepared can also be used with common textile finish auxiliaries such as crease-resist resin.

Typical Properties

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

Property	Unit	Result
Appearance		Clear to hazy or pale yellow
Viscosity	cp	5,000–15,000
Nitrogen content	%	0.6

How To Use

XIAMETER™ OFX-8468 Fluid can be emulsified into a microemulsion using a wide range of commercially available surfactants.

The following formulation is a guideline only; surfactants can be substituted providing the HLB (hydrophile/lipophile balance) is followed.

Table 1: Emulsification

INGREDIENT	% CONTENT
XIAMETER OFX-8468 Fluid	15.0
TO 5 ¹	4.5
XL 90 ¹	3.0
Pre-water	4.5
Pre acetic acid	0.1
Water	72.8
Acetic acid	0.1

¹TO 5 and XL 90 are supplied by BASF

Procedure

1. Add XIAMETER OFX-8468 Fluid, TO 5, and XL 90 into a beaker; agitate for 5 minutes.
2. Add the pre-water and pre-acetic acid; agitate at 1000 rpm for 10 minutes.
3. Mix the remaining acetic acid and dilution water, add it to the above solution slowly, and agitate at 350 rpm for 20 minutes until a homogeneous emulsion is achieved.
4. Control the pH value around 5.5–7.0.

A small variation in the HLB or in the ratio of surfactants will lead to changes in the emulsion appearance and stability.

A paddle stirrer is sufficient to prepare the emulsion. No high shear equipment should be used.

Attention: 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 have not been subjected to extensive testing. It is your responsibility to thoroughly test any formulation before use.

Application

Padding

1. Scour goods in a nonionic detergent and rinse thoroughly. Follow with an acid rinse using 2 g/L of 80% acetic acid for 5 minutes. This will neutralize any alkali residues from previous processes that may cause pad bath instability and lead to oil spots on fabric or gel on the rollers.
2. If crease-resist resins are used, dilute in the mixing tank in accordance with the manufacturer's instructions. If hot, cool to 30°C (86°F) before adding the silicone.
3. Predilute the required amount of the silicone emulsion with an approximately equal weight of cold water and add to the mixing tank.
4. If crease-resist resin catalyst is used, predilute with an equal weight of water and add to the mixing tank.
5. Top up to final volume with cold water and adjust to pH 5 with 80% acetic acid. This pH adjustment is necessary to obtain maximum softness and to help bath stability.

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XIAMETER™ OFX-8468 Fluid

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Application (Cont.)

Exhaustion

1. Scour goods in a nonionic detergent and rinse thoroughly. Follow with an acid rinse using 2 g/L of 80% acetic acid for 5 minutes. This will remove any alkali from previous processes that may reduce the rate of exhaustion.
2. Predilute the required amount of silicone emulsion with an approximately equal amount of water. Using a liquor-to-goods ratio of 20:1 or 30:1, prepare a fresh bath and adjust the pH to 4 with 80% acetic acid.
3. Over a 10-minute period, raise the temperature to 35–40°C (95–104°F) and maintain for 20–30 minutes. Complete exhaustion will then have taken place.

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 between 0 and 40°C (32 and 104°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.

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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