Technical Data Sheet

XIAMETER™ OFX-8166 Fluid

Amino functional silicone polymer

Features & Benefits

- Soft, greasy feel
- Durable
- Microemulsifiable

Applications

- Suitable for formulation into a microemulsion which can be applied by padding or exhaustion. (In the case of exhaustion on jet machines, customers should satisfy themselves of the shear stability of the emulsion prior to use).
- The prepared emulsion 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
Viscosity	cPs	1500
Nitrogen content	%	0.83
Appearance		Clear, pale yellow

Method Of Emulsification

XIAMETER™ OFX-8166 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.

Method

1. Mix together XIAMETER OFX-8166 Fluid, and the surfactants for 10 minutes.
2. Add the concentrate water and mix for 10 minutes. The viscosity will thicken.
3. Add the dilution water by small portions over 30 minutes, with good agitation.

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.

Form No. 95-463-01 A

Method Of Emulsification (Cont.)

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 by Padding

1. Scour goods in a non-ionic 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 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 also helps bath stability.

Application by Exhaustion

1. Scour goods in a non-ionic 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, and 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

When stored between 0°C and 40°C in the original unopened containers, this product has a usable life of 24 months from the date of production.

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 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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