Technical Data Sheet

XIAMETER™ OFX-8630 Fluid

Aminofunctional silicone polymer

Features & Benefits

- Very soft handle
- Low yellowing
- Crosslinkable
- Good durability
- Microemulsifiable

Applications

- Imparts excellent softness to all types of woven and knitted fabrics with significantly less yellowing of fabric than is obtained with ethylene diaminofunctional silicones.
- Imparts to fabric the premium softness which is associated with aminofunctional silicones. The nature of the polymer also allows it to be crosslinked should an elastomeric finish be required.
- Easily formulated into a stable micro emulsion which can be applied to fabric by padding and exhaustion. It can also be used in conjunction with common textile finish auxiliaries such as crease resist resins.

Typical Properties

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

Property	Unit	Result
Appearance		Clear, colorless to pale yellow liquid
Nitrogen	%	0.37
Viscosity	cPs	3500

Method Of Emulsification

XIAMETER™ OFX-8630 Fluid can be readily made into a microemulsion using a range of commercially available surfactants. The formulation given in Table 1 and method is given as an example but other surfactants can be substituted if required providing their hydrophilic-lipophilic balance (HLB) value is comparable. Please contact the surfactant suppliers for the HLB information.

Method Of Emulsification (Cont.)

Table 1: Formulation

Ingredients	% Content
XIAMETER OFX-8630 Fluid	15.0
Lutensol TO-7 [1]	6.5
Lutensol TO-5 [1]	1.0
Pre- water	17.3
Pre-Acetic Acid	0.1
Dilution water	60.0
Rest- Acetic acid	0.1

[1]Available in Europe from BASF. Equivalent surfactants from other suppliers may be used.

Method

1. Mix together the silicone polymer and the surfactants for 10 minutes.
2. Add the Pre-water and Pre-acetic acid, stir for another 10 minutes. The mixture will increase in viscosity.
3. Mix the Rest-acetic acid and dilution water, add into above mixture while stirring continuously.
4. Stir for another 20 minutes.

The emulsion formed is suitable for application by padding or exhaustion with or without crease resist resin. The concentration of silicone required to give the desired properties will depend on the fabric construction and the fibre content of the fabric. Generally between 10 g/l and 30 g/l of the emulsion is recommended.

Application By Padding

1. Scour goods in a non-ionic detergent and rinse thoroughly. Follow with an acetic acid rinse using 2 g/1 of acetic acid for 5 minutes. This will neutralize any alkaline residues from previous processes that may cause the pad bath instability and lead to oil spots on fabric or gel on the rollers.
2. Pre-dilute the required amount of emulsion with an approximately equal weight of cold water and add to the mixing tank. If hot, cool to below 30°C (86°F) before adding the silicone emulsion.
3. If crease resist resins are used, dilute in accordance with the manufacturers' instructions and add to the mixing tank.
4. Top up to final volume with cold water and adjust to pH 6.0–7.0 with acetic acid. This pH adjustment is necessary to obtain maximum softness and also helps bath stability.

Precautions

- Start with clean mixing tank, delivery lines, pad box and rolls.
- Always dilute with cold water.
- Do not use a high speed stirrer when making finishing liquor.
- The pH must always be below 7 (preferably in the range 6.0–7.0) in the pad bath.

ATTENTION: Sample formulations are provided for illustrative purposes only. Dow does not warrant 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.

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 -20°C (-4°F) and 40°C (104°F) in the original unopened containers, this product has a usable life of 18 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