Technical Data Sheet

XIAMETER™ AFE-0800 Antifoam Emulsion

Silicone antifoam concentrate

Features & Benefits

- Highly dispersible
- Stability to high shear
- Heat stability
- Stability to pressurization
- Electrolyte compatibility
- Stability to a wide range of pH

Applications

- Dilutions of XIAMETER™ AFE-0800 Antifoam Emulsion are especially effective in high temperature, high shear, high-pressure applications such as textile jet dyeing and scouring processes. Diluted emulsions from XIAMETER™ AFE-0800 Antifoam Emulsion can also be used in atmospheric applications, such as textile printing, finishing and bleaching.

Typical Properties

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

CTM[1]	Property	Unit	Result
0176	Appearance		Milky white liquid
0242	Nonvolatile Content	%	27–31
0050	Viscosity	Cp	Maximum
0007	pH		5.5–7.4
0097	Weight per Gallon	lb/Gal	8.30–8.50

1. CTM: Corporate Test Method, copies of CTM's are available on request.

Description

XIAMETER™ AFE-0800 Antifoam Emulsion is an antifoam/defoamer concentrate designed to be diluted and neutralized prior to use. Diluted emulsions from XIAMETER™ AFE-0800 Antifoam Emulsion are highly dispersible and active in caustic, acid, high salt, high temperature and high pressure environments and will not degrade under high shear conditions found in textile jet dye applications.

Form No. 95-1020-01-0720 S2D

How to Use

Dilution

XIAMETER™ AFE-0800 Antifoam Emulsion is not intended for use as is. Recommended dilution and neutralization instructions for a 5–6% solids formulation are as follows:

1. Add 0.45 parts of a 10% NaOH solution to 79.1 parts water.
2. Stir water and 10% NaOH solution.
3. Add 20 parts of XIAMETER™ AFE-0800 Antifoam Emulsion and mix until uniform.
4. Add additional 0.45 parts 10% NaOH solution.
5. Mix until smooth and uniform.

It is recommended that the entire mix be done in the order specified. When mixing with propeller-type mixing equipment, do not exceed 1000 rpm. Lower mixing speeds are acceptable as long as good mixing action is obtained. Final pH should be between 6.5–7.5. Typical diluted viscosity is 950–1350 cP.

Higher solids dilutions are achievable. The ratio of NaOH solution to XIAMETER™ AFE-0800 Antifoam Emulsion should be kept the same.

NOTE: A preservative to guard against microbial growth is included in XIAMETER™ AFE-0800 Antifoam Emulsion. No additional preservative is needed upon dilution.

Application

The diluted and neutralized XIAMETER™ AFE-0800 Antifoam Emulsion (5–6% solids) should be added separately to the side tank of a jet-dyeing machine without further dilution at a level of 0.1 to 2 grams per liter (100–2000 ppm), depending on the foam characteristics of the bath.

Exact concentrations and performance can be determined by conducting standard laboratory foam tests with a sample of the foaming medium.

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 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.

During prolonged storage there may be a slight tendency for product separation; therefore, it is recommended that XIAMETER™ AFE-0800 Antifoam Emulsion be gently agitated prior to use to ensure homogeneity.

XIAMETER™ AFE-0800 Antifoam Emulsion will freeze below 0°C (32°F). If frozen, allow to thaw at 18–29°C (64.4–84.2°F) for at least one day and agitate gently to assure homogeneity.

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, dow.com or consult your local Dow representative.

Disposal Considerations

Dispose in accordance with all local, state (provincial) and federal regulations. Empty containers may contain hazardous residues. This material and its container must be disposed in a safe and legal manner.

It is the user's responsibility to verify that treatment and disposal procedures comply with local, state (provincial) and federal regulations. Contact your Dow Technical Representative for more information.

Product Stewardship

Dow has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with Dow products - from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

Customer Notice

Dow strongly encourages its customers to review both their manufacturing processes and their applications of Dow products from the standpoint of human health and environmental quality to ensure that Dow products are not used in ways for which they are not intended or tested. Dow personnel are available to answer your questions and to provide reasonable technical support. Dow product literature, including safety data sheets, should be consulted prior to use of Dow products. Current safety data sheets are available from Dow.

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