



Technical Data Sheet

XIAMETER™ AFE-0100 Antifoam Emulsion Food Grade

Foam preventative for food and industrial applications

Features & Benefits

- Water dilutable
- Easy to use

Composition

- Milky-white, viscous liquid silicone emulsion

Applications

XIAMETER™ AFE-0100 Antifoam Emulsion Food Grade can be used in a variety of food and chemical process applications. Typical uses include:

- Food fermentation operations
- Brine applications
- Vegetable processing
- High sugar-containing products
- Carpet cleaning

Typical Properties

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

Property	Unit	Result
Appearance		White
Active Ingredient	%	30
Specific Gravity at 25°C (77°F)		1.0
Viscosity at 25°C (77°F)	cP	50,000
Consistency at 25°C (77°F)		Thick
pH		3.5
Emulsifier Type		Nonionic
Suitable Diluent		Cool water

Description

XIAMETER™ AFE-0100 Antifoam Emulsion Food Grade is a 30 percent food-grade silicone emulsion. This antifoam is water dilutable and effective in many systems.

FDA Status

XIAMETER™ AFE-0100 Antifoam Emulsion Food Grade complies with FDA Regulation 21 CFR 173.340, which covers secondary direct food additives used as defoaming agents and allows concentrations of up to 10 parts per million active silicone (dimethylpolysiloxane) in non-standardized foods.

EPA Status

The ingredients in XIAMETER™ AFE-0100 Antifoam Emulsion Food Grade are exempt from tolerances at 40 CFR 180.910, 40 CFR 180.920 and 40 CFR 180.960.

Kosher Status

Kosher certified product available. Contact your local representative for current compliance information.

Halal Compliance

Please contact your local representative for current Halal compliance documentation.

Other Food Regulation Status

To get the status of XIAMETER™ AFE-0100 Antifoam Emulsion Food Grade, please always refer to the Food Additive/Food Contact – Regulatory Information sheet available on request to our customer service.

GMO Status

XIAMETER™ AFE-0100 Antifoam Emulsion Food Grade does not contain genetically modified organisms. Dow does not test for genetically modified organics.

How to Use**Amount Needed**

XIAMETER™ AFE-0100 Antifoam Emulsion Food Grade is effective in very low concentrations. One to 10 parts of active silicone per million parts foamer are sufficient to control foaming in many systems. Begin trials at higher use levels (10 ppm active silicone), then work down to the level of foam control desired.

The following are parts per million equivalents:

To Yield 10 ppm	
Antifoam	Mixed in
2.23 ounces	500 gallons
4.46 ounces	1,000 gallons
11.13 ounces	2,500 gallons
3.33 quarts	25,000 gallons

Adding the Antifoam

To produce optimal foam control, it is necessary to have the antifoam completely dispersed in the foaming medium. Follow these steps to achieve complete dispersion:

1. Agitate the product prior to use.
2. Predilute with 3 to 10 parts of cool water to aid in dispersion. Add the antifoam to the water with slow mixing. Prediluted material should be used immediately. If the system can provide adequate agitation to disperse the antifoam, the antifoam emulsion may be added directly with no predilution necessary.
3. Add the antifoam prior to the point where foaming occurs within the system, if possible.

A preservative to guard against microbial growth is included in XIAMETER™ AFE-0100 Antifoam Emulsion Food Grade. Dilution will substantially diminish the effectiveness of the preservative. If diluted material is to be stored for more than several days, additional preservative may be required. Contact your local representative for additional information.

**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 20 and 40°C (68 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-0100 Antifoam Emulsion be gently agitated prior to use to ensure homogeneity.

XIAMETER™ AFE-0100 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.

**Shipping
Limitations**

None.

**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.

dow.com

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