



Technical Data Sheet

DOWSIL™ AFE-3101 Antifoam Emulsion

20 percent active silicone emulsion

Features & Benefits

- Highly efficient antifoam and defoamer at low concentration levels
- Immediate foam control action
- Persistent foam control action
- Easy to disperse in aqueous systems
- Complies with key chemical control laws and regulations

Composition

- Silicone antifoam emulsion

Applications

- Agrochemicals
- Bottle filling operations
- Chemical processing
- Liquid detergents and cleaning products

Typical Properties

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

| CTM ¹ | Property | Unit | Result |
|------------------|------------------------|-------|--------------------|
| 0176B | Appearance | | Off-white emulsion |
| 0050 | Viscosity ² | mPa.s | 700 |
| 0007A | pH | | 3.5–5 |
| 0862A | Non-volatile content | % | 23–27 |
| | Active ingredient | % | 20 |
| | Emulsifier type | | Non-ionic |
| | Diluent | | Water |

1. CTM: Corporate Test Method, copies of CTM's are available on request.
2. Brookfield – Spindle 3–50 rpm

Description

DOWSIL™ AFE-3101 Antifoam Emulsion is designed for controlling foam in industrial aqueous systems. DOWSIL™ AFE-3101 Antifoam Emulsion is recommended where quick foam knockdown is desired and also when effective foam control is needed during the end-use of formulated products.

How to Use

As Process Aid

For maximum antifoaming and defoaming efficiency, DOWSIL™ AFE-3101 Antifoam Emulsion should be prediluted with 3 to 5 parts of water just before adding to the foaming system. Add the water to the DOWSIL™ AFE-3101 Antifoam Emulsion and not vice-versa. Only small concentrations of 10 to 500 ppm are needed for most systems.

For Effective Foam Control During End-use Application

DOWSIL™ AFE-3101 Antifoam Emulsion can be added directly from the shipping container to the foaming system. Concentrations can vary from system to system. Concentrations in the range of 0.2 to 3% (2000 to 30000 ppm) are recommended for liquid detergent applications.

In any case, the exact appropriate concentration must be estimated by testing in the foaming formulation.

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 5 and 35°C (41 and 95°F) in original, unopened containers.

As water based material this product should be protected from freezing. Once it has frozen this material is damaged and cannot be used or reworked.

Limitations

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

FDA (Food and Drug Administration)

DOWSIL™ AFE-3101 Antifoam Emulsion may be used in compliance with the following sections:

- 175.105 Adhesives.
- 176.210 Defoaming agents used in the manufacture of paper and paperboard.

EPA (Environmental Protection Agency)

DOWSIL™ AFE-3101 Antifoam Emulsion is exempt from Tolerances for Pesticide Chemicals in or on Raw Agricultural Commodities at 40 CFR 180.1001.910.

EU Food Contact Legislation

This product has been assessed for applications intended to come into contact with food. Please refer to our European Food Contact Regulatory Status document for further details.

The ingredients in DOWSIL™ AFE-3101 Antifoam Emulsion are not derived from animals. The emulsifiers are derived from vegetable oils.

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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