Technical Data Sheet

XIAMETER™ ACP-0544 Antifoam Compound

Water dispersible 100% active silicone antifoam compound containing hydrophobic silica, silicone surfactants and PDMS

Features & Benefits

- Good shear and high temperature stability
- Self-emulsifying in water antifoam systems
- Can also be used in a nonaqueous environment
- De-aeration of detergent slurries leading to low process viscosity, denser powder and reduced manufacturing time
- Suitable for a wide range of surfactants, over a wide range of pH and washing temperatures
- Non-hazardous
- Not dependent on water hardness
- Excellent antifoaming action during the entire dyeing cycle but particularly during the pressurization stage
- Easily diluted in cold water
- Minimizes fabric staining and spotting

Applications

- Slurry addition process aid: De-aeration leading to low process viscosity (easier pumping), denser powder and reduced manufacturing time.
- Liquid detergents: Suitable for controlling foam in end-use applications of many liquid detergent products.
- Jet dyeing machines: Effective antifoam for use in jet dyeing machines. It is well suited for a wide variety of general textile and carpet dyeing applications where foam is a problem.

Typical Properties

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

CTM[1]	Property	Unit	Result
0176B	Appearance		Yellow, pourable liquid
0050FX	Viscosity at 25°C	cP	3000
	Specific gravity at 25°C (77°F)		1.03
	Solid content (by thermos gravimetry analysis - TGA)	%	24–32
1100L	Flash point, closed cup	°C	> 100
	Suitable diluent		Water

1. CTM: Corporate Test Method. Copies of CTMs are available on request.

Form No. 95-842-01-0720 S2D

Description

XIAMETER™ ACP-0544 Antifoam Compound is a water-dispersible compound.

How to Use

Slurry De-aeration
XIAMETER™ ACP-0544 Antifoam Compound should be added to the detergent slurry after the addition of all liquid components and before the addition of any solid components. Typical addition levels are between 0.05 and 0.2% but these should be determined by testing as they vary according to the exact composition of the detergent.

Liquid Detergents
Due to its good dispersibility in aqueous systems, XIAMETER™ ACP-0544 Antifoam Compound is suitable for controlling foam in end-use applications of many liquid detergent products. For example, it may be used to control foam produced by liquid hard surface cleaning products and liquid laundry products. Typical addition levels are between 0.1 and 0.5% depending on the surfactant composition of the detergent. Precise addition levels should be determined by testing.

Jet Dyeing Machines
XIAMETER™ ACP-0544 Antifoam Compound is particularly recommended for use in jet dye machines. The high shear in the process causes conventional antifoams to break down, resulting in oil spotting. XIAMETER™ ACP-0544 Antifoam Compound is formulated to avoid this.

Dilute XIAMETER™ ACP-0544 Antifoam Compound with at least nine equal volumes of cold water before use. The diluted compound may be added separately to the dye bath at any convenient time during the dyeing cycle. Its unique solubility allows it to be mixed with other chemicals such as dye carrier and scouring agent in the chemical tank. However, this should be pre-emulsified with cold water before adding to the dye bath. This ensures proper dispersion of the antifoam. Although the effective concentration will vary in specific dyeing formulations, XIAMETER™ ACP-0544 Antifoam Compound is often effective in concentrations as low as 50 ppm as supplied.

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 at or below 35°C (95°F) in original, unopened containers.

Limitations

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

Not intended for human injection. Not intended for food use.

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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