DOW CORNING

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Silicones Simplified
XIAMETER®
from DOW CORNING

XIAMETER® ACP-3073 Antifoam Compound

Effective foam-control agent and process aid for kraft pulp-washing

Features and Benefits

- Improved drainage in pulp-washing process applications
- Low use levels compared to mineral-oil-based defoamers
- Excellent foam-knockdown effect and persistency over time
- Versatility for formulating aqueous dispersions and emulsions
- Food contact as specified in the food regulatory profile

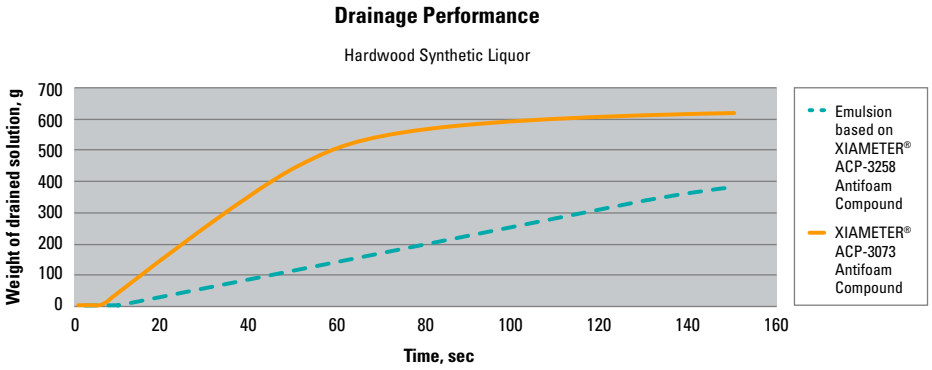
Silicone-based antifoams developed by Dow Corning are among leading choices for use in pulp-washing processes designed for high production rates with reduced water usage. Compared to organic defoaming options, silicones can be more effective at lower use levels, longer-lasting, less reactive, and more stable at various process pH levels and temperatures.

One of the key challenges silicones can meet involves controlling foam during kraft brown-stock-washing (BSW) processes. Kraft or sulfate pulping remains the most common chemical process used to produce bleached or unbleached high-quality pulp for paper mills.

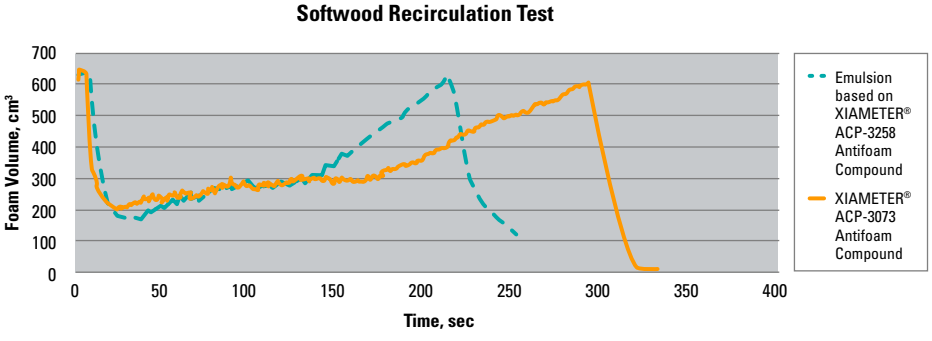
XIAMETER® ACP-3073 Antifoam Compound from Dow Corning is a 100% active silicone compound, designed to give users an effective solution for such aggressive foaming environments.

Antifoam Process Performance

Drainage Testing: With better drainage performance than a reference antifoam solution, XIAMETER ACP-3073 Antifoam Compound can help improve pulp-washing efficiency by reducing the amount of entrapped air in the pulp mat.



Knockdown/Persistency Testing: Compared to a reference solution, XIAMETER ACP-3073 Antifoam Compound shows immediate foam reduction (knockdown) capability, as well as good persistency in preventing further foam formation over time.



Prototype Formulation: XIAMETER ACP-3073 Antifoam Compound can be used at low dosage levels, as shown in the following prototype formulation used in antifoam process performance tests:

1. Load XIAMETER ACP-3073 Antifoam Compound (20%).
2. Add surfactants (4%).
3. Mix.
4. Add biocide and thickener in water-based solution (31%) in multiple steps with high-speed mixing.
5. Add remaining water (45%).

Typical Properties

NOTE: These values are not intended for use in preparing specifications. Contact your XIAMETER® sales representative prior to writing specifications on this product.

Test	Value
Appearance	White to pale yellow viscous liquid
Viscosity*	20,000 to 50,000 mPa•s

*Carri-Med, cone and plate, 6 cm. Shear rate = 2 sec^{-1}.

Learn More

The XIAMETER® brand from Dow Corning offers an extensive line of efficient, high-quality products to meet defoaming challenges in pulp and paper processing. Available worldwide at market-based pricing, our wide range of antifoam emulsions, compounds and performance modifiers is available online and through our network of XIAMETER® distributors. Technical support is available as needed.

For more information about our materials and capabilities, visit **www.xiameter.com**.

Images: AV22375, AV22376

HANDLING PRECAUTIONS

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND MATERIAL SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE MATERIAL SAFETY DATA SHEET IS AVAILABLE ON THE DOW CORNING WEBSITE AT DOWCORNING.COM, OR FROM YOUR DOW CORNING SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CORNING CUSTOMER SERVICE.

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