



Silicone Antifoam Solutions

AB SPECIALTY SILICONES • RAW MATERIAL SOLUTIONS
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foam

noun \ˈfōm\
: a mass of small bubbles formed on or in liquid, typically by agitation or fermentation

anti·foam

noun an-ti·foam \an-tē-ˈfōm, an-tī-\
: a substance that prevents the formation of foam

de·foam·er

noun de·foam·er \(')deˈfōmə(r)\
: a substance that reduces or eliminates foam

Antifoam Emulsions Designed as highly efficient, ready-to-use and easily dispersible foam control options for aqueous systems including food & kosher grade applications (FGK).

Product	% Active	Viscosity	Industries	Benefits
Andifoam DF 210	10.0	2,000 cP	■ General manufacturing	■ Easy to use ■ Effective in hot and cold systems
Andifoam DF 220	20.0	2,000 cP		
Andifoam DF 230	30.0	3,000 cP		
Andifoam DF 210FGK*	10.0	1,900 cP	■ Secondary food contact	■ Compliant FDA Regulations 21 CFR 173.340, 21 CFR 176.170 and 21 CFR 176.180 ■ Kosher Grade
Andifoam DF 220FGK*	20.0	1,500 cP		
Andifoam DF 230FGK*	30.0	2,000 cP		
Andifoam DF 3050	50.0	2,500 cP	■ Textile applications including beck and jet dyeing	■ Highly efficient antifoam at low concentration levels (25-50ppm) ■ Sustained foam control throughout the dye cycle ■ Stable at high shear ■ Stability to a wide range of pH and temperature conditions

Antifoam Compounds 100% Active silica-filled polydimethylsiloxane antifoam compounds formulated for use in applications where aggressive foaming occurs.

Product	% Active	Viscosity	Industries	Benefits
Andifoam DFA 100M FGK*	100.0	2,500 cP	■ Pesticide production ■ Syrup processes ■ Edible manufacturing	■ Compliant FDA Regulations 21 CFR 173.340, 21 CFR 176.170 and 21 CFR 176.180 ■ Kosher Grade
Andifoam DFA 400	100.0	2700 cP	■ Resin manufacturing	■ Economical ■ Easy to use

Low Viscosity Excellent foam control; easier emulsion formulation and increased formulation versatility due to low viscosity

Andifoam DFA 2000	100.0	3000 cP	■ Pulp & paper ■ Chemical Manufacturing ■ In-wash foam-control for laundry powder detergents; soaps	■ Long lasting foam control ■ High efficiency in alkaline conditions and at elevated temperatures ■ High efficiency at low dose
Andifoam DFA 2100	100.0	4000 cP		

High Viscosity Outstanding foam control at low usage levels compared to conventional mineral -based antifoams

Andifoam DFA 3000	100.0	--	■ High persistence, branched antifoam compound for high shear applications
Andifoam DFA 3300	100.0	45,000 cP	
Andifoam DFA 3400	100.0	40,000 cP	■ Excellent foam knockdown and persistence; improved drainage
Andifoam DFA 3500	100.0	30,000 cP	
Andifoam DFA 3600	100.0	35,000 cP	■ Easy to emulsify; very good foam knockdown and persistence; recommended for all foaming environments
Andifoam DFA 8000	100.0	--	
			■ Easy to emulsify; high persistence, modified silicone antifoam compound for applications where compatibility is critical

* Food & Kosher Grade



knock·down

noun 'nākdəʊn/

: amount of foam reduction immediately after adding a defoamer

per·sist·ence

noun per·sis·tence \pər-'si-stən(t)s, -'zi-\

: duration of foam control effectiveness

Antifoam Concentrates

100% active, emulsifiable and self-dispersing antifoam concentrates composed of a blend of silicone glycol, polydimethylsiloxanes and silica offer outstanding persistence at a fraction of the usage levels required when using conventional mineral -based antifoams. These pour-able concentrates are particularly useful in processes where high dosing accuracy is desired.

Product	% Active	Viscosity	Industries	Benefits
Andifoam DFC 3100	100.0	15,000 cP	■ Kraft and sulfite process stock washing	■ Cost effective
Andifoam DFC 3200	100.0	25,000 cP	■ Chemical manufacturing	■ Outstanding foam control and process aid
				■ Improved pulp drainage
				■ Reduced soda losses and steam consumption
				■ Formulated with materials that conform to FDA Regulation 21 CFR 176.170, 176.180 and 176.210

Antifoam Powders

100% Active silica-filled polydimethylsiloxane antifoam compounds formulated for use in applications where aggressive foaming occurs. Active at low addition levels

Product	% Active	Industries	Benefits
Andifoam DFG 4010	10.0	■ Industrial cleaners ■ In-wash foam-control for laundry powder detergents	■ No performance loss on storage under warm and humid conditions in the detergent powder
			■ Free-flowing, non-caking granules, easy to incorporate by dry-mixing
			■ 100% detergent active components
			■ Suitable for a wide range of surfactants, over a wide range of pH and washing temperatures
			■ Performance not dependent on water hardness
Andifoam DFG 4120	20.0	■ Biotechnology applications ■ Ultra-filtration systems ■ Food grade applications ■ Brewing / Fermentation ■ Waste Water Treatment ■ Fertilizer	■ FDA-permitted for many food uses
			■ Powdered form allows for convenient weighing and measuring; easy storage
			■ For foam control in various applications without reducing yield or interfering with bacterial growth

Performance Modifiers

EO / PO containing siloxylated polyethers used as performance modifiers for antifoams.

Product	HLB	Viscosity	Industries	Benefits
Andisil® SP 5100	5.7	2,300 cSt	■ Pulp & paper ■ Coatings ■ PU Foam	■ Used for compatibilizing MDI with water
				■ Additive to provide slip & mar resistance
				■ Surfactant used in preparation of flexible PU foam
Andisil® SP 5300	6.7	360 cSt	■ Pulp & paper ■ General	■ Stabilizes emulsions in various media ex. alcohols
				■ Preparation of in water (O/W) or silicone in water emulsions
				■ Soluble in ethanol; water dispersible
				■ Knockdown & persistence booster for antifoams
				■ Stability booster for antifoam emulsions
Andisil® SP 5200	3.4	17,000 cSt	■ Pulp & paper	■ Drainage / De-aerator booster for pulp antifoams
Andisil® SP 5500	6.3	4,450 cSt	■ General	■ Knockdown booster for antifoams
				■ Stability booster for antifoam emulsions
				■ Water soluble

Antifoam Properties



Antifoam Compounds	P E R F O R M A N C E		
	Knockdown	Persistence	Drainage
Andifoam DFA 3000	x	x	x
Andifoam DFA 3300		x	
Andifoam DFA 3500	x	x	
Andifoam DFA 3600	x	x	

Figure 1

Performance Modifiers	P E R F O R M A N C E			
	Knockdown	Persistence	Drainage	Emulsion Stability
Andisil® SP 5100	x	x	x	x
Andisil® SP 5200	x	x	x	x
Andisil® SP 5300	x	x		x
Andisil® SP 5500	x	x	x	x

Figure 2

Combination example: 95% Compound 5% Performance Modifier		P E R F O R M A N C E		
		100% Compound	With Andisil® SP 5200	With Andisil® SP 5500
Andifoam DFA 3300	Drainage	+++	+++++	+++++
	Knockdown	-	-	•
	Persistence	•	---	•
Andifoam DFA 3400	Drainage	+++++++	+++++++	+++++++
	Knockdown	++	+	++
	Persistence	++	+	+++
Andifoam DFA 3500	Drainage	•	+++++	+
	Knockdown	•	•	•
	Persistence	•	+++	+
Andifoam DFA 3600	Drainage	•	++	++
	Knockdown	•	--	•
	Persistence	---	----	--

Figure 3

Performance key: Poorest ----
Neutral •
Best ++++++++

About AB

AB Specialty Silicones is a US Manufacturer and Worldwide Distributor of specialty silicone chemicals. With customer focus at the forefront, our goal is to be the one source for all of your silicone raw material needs – providing the highest quality materials, service and technical expertise available. Our core brand is Andisil®, representing high quality materials and encompassing a broad product catalog serving many industries.

At the heart of our company is our vision – Enthusiasm & Innovation Create Success. Our team works hard to let our customers know how important they are. Present us with your needs, and we will figure out the possibilities.

HEADQUARTERS

3725 Hawthorn Court
Waukegan, IL 60087

CONTACT

Sales & Customer Service
(847) 599-7765

EMAIL

info@andisil.com

WEBSITE

www.andisil.com

Why Choose AB?

- Custom blending capabilities offering ease of formulation and cost reduction
- Silicones formulated to suit your needs
- Top quality service from synthesis to delivery
- US Manufacturer
- Illinois-based warehousing resulting in minimal lead times

We believe that the information shown in this Product Bulletin to be an accurate description of the typical characteristics and/or uses of the products. Any suggestions of uses are not to be taken as an inducement to infringe any particular domestic or foreign patent. We recommend that the products be thoroughly tested for a specific application to determine the performance, efficacy and its safe handling and use.



Enthusiasm & Innovation Create Success.