

# DEFOAMERS FOR PAINTS AND COATINGS

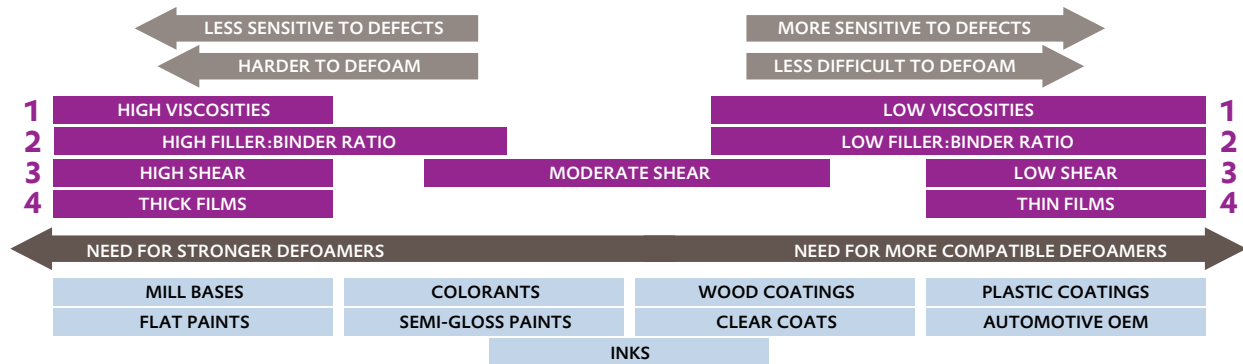
Determining the correct defoamer is a process of finding balance between defoaming strength and compatibility for optimal results in a specific system. Many factors influence the selection of an appropriate defoamer; therefore, we have developed a simple 4-step process to help.

- 1 VISCOSITY** High viscosity systems are harder to defoam (need stronger defoamers). Low viscosity systems are more sensitive to defects (more compatible defoamer).
- 2 FILLER-TO-BINDER RATIO** High filler-to-binder ratio systems

are less sensitive to defects, and strong defoamers, are more effective. Low filler-to-binder ratio systems and clear coats are very sensitive to defects so weaker defoamers with greater formulation compatibility are most effective.

- 3 SHEAR** If using high shear during defoamer addition, less compatible defoamer may be incorporated. If using low shear, a more compatible defoamer should be chosen.
- 4 FILM BUILD/APPLICATION** Thick films demand stronger defoamers. Thin films and coatings require very compatible defoamers.

## FACTORS TO BE CONSIDERED WHEN SELECTING A DEFOAMER



Evonik Corporation offers a full spectrum of defoamer chemistries, including organic oil, siloxane and our own unique molecular defoamers, so that formulators can quickly find the proper product needed to achieve defect-free foam control in a broad range of systems and applications. When looking for a defoamer having the optimal balance between defoaming strength and system compatibility, think of Evonik Corporation for quick and effective solutions to your toughest foam control challenges.

## DEFOAMER SPECTRUM

	SILOXANES	OIL-BASED	MOLECULAR
STRONGER DEFOAMING ▲	AIRASE® 5100		
	AIRASE® 5200		
	AIRASE® 5300		
	AIRASE® 5355		
	SURFYNOL® DF695	AIRASE® 4500	
	AIRASE® 5400	AIRASE® 4655	
		SURFYNOL® DF220	
	SURFYNOL® DF58		
	AIRASE® 8070*		
	AIRASE® 5500		
▼ MORE COMPATIBLE	SURFYNOL® DF62	SURFYNOL® DF37*	
	SURFYNOL® DF66		
	AIRASE® 5600		
	AIRASE® 5655		
	SURFYNOL® DF178		
	AIRASE® 5700		
			SURFYNOL® DF110*
			SURFYNOL® AD01*
			SURFYNOL® 107L*
			SURFYNOL® MD20*
		SURFYNOL® 104*	
		SURFYNOL® 420*	
		SURFYNOL® PC*	

\* These products are superb deaerators, suitable for eliminating microfoam.

+++ Very suitable  
+ Suitable

Defoamer	Defoamer type	POINT OF ADDITION		PIGMENTATION		INTERIOR PAINTS			EXTERIOR PAINTS			COATING							
		Grinding stage	Leidown stage	Pigment	Unpigmented	Flat/satin	Semigloss	High-gloss	Flat/satin	Semigloss	Gloss	2K epoxy	2K PU	Acrylic	Alkyd	Polyester	PU	PU/acrylic	Styrene acrylic
AIRASE® 5100 defoamer	SSDL*	+++		+++		+++	+	+	+++	+	+			+++				+++	+++
AIRASE® 5200 defoamer	SSDL	+++		+++		+++	+++	+	+++	+++	+		+++	+++				+++	+++
AIRASE® 5300 defoamer	SSDL	+++		+++	+	+++	+++	+	+++	+++	+		+++	+		+	+	+	+
SURFYNOL® DF-695 defoamer	Siloxane	+		+++								+	+	+			+		
AIRASE® 4500 defoamer	Oil	+	+	+++		+++	+		+++	+++	+		+	+	+++			+++	+++
AIRASE® 5400 defoamer	SSDL	+++	+	+++	+	+	+	+++	+	+	+++		+	+	+		+++	+	+
SURFYNOL® DF-220 defoamer	Mineral Oil	+	+	+++	+	+	+		+	+++	+		+	+	+++			+	
SURFYNOL® DF-58 defoamer	Siloxane	+++	+++	+++	+++		+	+++		+	+++		+	+++	+++		+++	+++	+++
AIRASE® 8070 deaerator	Siloxane	+++	+++	+++	+++		+	+		+	+	+	+++	+++	+++	+	+++	+++	+
AIRASE® 4750V defoamer	Vegetable oil	+	+++	+++	+++		+	+++		+	+++	+++	+	+++	+	+	+	+	+
AIRASE® 4800 defoamer	Mineral oil	+	+++	+++	+++		+	+++		+	+++	+	+	+++	+	+	+	+	+
AIRASE® 5500 defoamer	SSDL	+	+++	+++	+	+	+	+++	+	+	+++	+	+++	+++	+++		+++	+++	+++
SURFYNOL® DF-62 defoamer	Siloxane	+	+++	+++	+++		+	+++		+	+++	+++	+	+++	+		+++	+++	+
SURFYNOL® DF-37 defoamer	Oil	+	+++	+++	+	+	+	+	+	+++	+		+	+				+++	+++
SURFYNOL® DF-66 defoamer	Siloxane		+++	+++	+++		+	+++		+	+++	+++		+++	+	+++	+++	+++	+
AIRASE® 5600 defoamer	SSDL	+	+++	+++	+++		+	+		+	+	+	+	+++	+++	+	+	+++	+++
SURFYNOL® DF-178 defoamer	Siloxane	+	+++	+	+++		+	+		+	+++		+++	+		+	+++	+	
SURFYNOL® DF-110 defoamer	Molecular	+++	+++	+	+++			+		+	+++	+++	+	+		+++	+	+	
AIRASE® 5700 defoamer	SSDL		+++	+++	+++			+		+	+++	+	+	+	+	+	+	+++	+
SURFYNOL® AD01 defoamer	Molecular	+++	+++	+	+++			+		+	+	+	+	+	+	+		+	
SURFYNOL® 107L surfactant	Molecular	+++	+++	+	+++			+		+	+	+	+	+	+	+		+	
SURFYNOL® MD-20 defoamer	Molecular	+	+++	+	+++			+		+	+		+	+		+		+	
SURFYNOL® 104 surfactant	Molecular	+++	+	+	+++								+	+	+			+	
SURFYNOL® PC defoamer	Molecular		+		+									+	+				

\* SSDL = Structured Siloxane Defoamer Line defoamers  
All products may not be available in all regions. Please contact your local supplier for availability.

NOTE: SURFYNOL® DF-110 and SURFYNOL® 104 are available diluted in different solvents.  
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