

DEFOAMER &
AIR RELEASE AGENT



for performance & application

Thick-layer applications

Solvent-free systems

Fast air release

Floorings

Protective coatings

## **DESCRIPTION**

Densurf AF 200, polysiloxane based deaerator, effects on both macro and micro foams.

Recommended for pigmented solvent-free 2K epoxy systems.

Contains hydrophobic particles.





## Performance Test in Solvent-free Epoxy System



Foam formation is the most common problem in solvent-free systems and high-build paints. Effective air release agents are used to allow the foam to rise to the surface, be ruptured and discharged from the system.

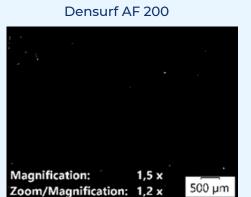
In this study, 0.5% of Densurf AF 200 was added to the paint, its formulation is given on the righthand side.

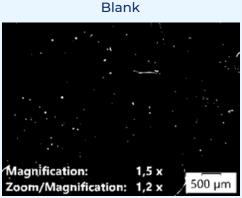
In order to test the performance of Densurf AF 200, paint was mixed with a higher shear during 10 min. Then, densities of the paints were recorded after 5 min. Density values are given below. Theorical density of the paint was calculated as 1.506 g/ml.

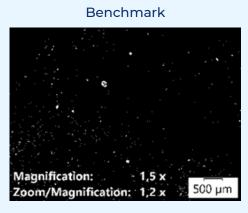
	Amount (%)	
Epoxy Resin	48	
Reactive Diluent	12	
Rheology Modifier	1.8	
Iron Oxide Red Pigment	5	
Talc	13.4	
Barite	19.8	
TOTAL	100	

	Density (g/ml, 20°C) t=0 day @ 25°C	Density (g/ml, 20°C) t=1 day @ 25°C	Density (g/ml, 20°C) t=30 days @ 50°C
Blank	1.143	1.186	1.186
Densurf AF 200	1.455	1.457	1.478
Benchmark	1.434	1.447	1.452

Micro foams were examined under the microscope (Olympus SZX7 Stereo Microscope) after the paint applied to the transparent acetate paper without any shear force.







Finally, recoatibility performance of the paints were tested. First layer of paint (100  $\mu$ ) was applied on metal sheet and cured at 80°C for 1 hour. Then, the second layer was applied on the cured film after it was brought to room temperature and cured at 80°C for 2 more hours. Adhesion test was performed after the process, and the results are given right-hand-side.



## Provides highly efficient deaeration in solvent-free epoxy systems Excellent long-term performance Has no effect on the recoatability of solvent-free epoxies





