

DESCRIPTION

DENSURF DA 413 is a copolymer with acidic anchor groups

Recommended for the dispersion of inorganic pigments, especially titanium dioxide.
Used in solvent-based coatings.

for performance & application

- O Decreases mill-base viscosity
- Inorganic pigments and titanium dioxide
- Protective coatings
- Wood Coatings
- General industrial coatings







Performance Test in Acrylic PU Topcoat



Densurf DA 413 was tested with a benchmark product in a 2K PU acrylic system formulated with titanium dioxide pigment.

Viscosity and fineness of the grind values of the paints were checked after stability. Additionally, gloss and distinctness of image (DOI) levels of the paint films were measured before and after stability. For the stability tests, paints were stored in 50° C for 1 month. Finally, paints were tinted with naphthol red pigment paste and rub-out tests were performed to check the stability.

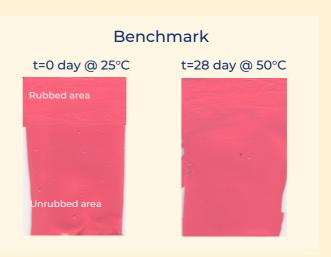
Results are given below.

	Viscosity (mPas, @20°C) t=0 day @ 25°C	Viscosity (mPas, @20°C) t=28 day @ 50°C
Densurf DA 413	1200	2000
Benchmark	1300	2300

	Fineness of grind (μ) t=0 day @ 25°C	Fineness of grind (µ) t=28 day @ 50°C
Densurf DA 413	10	15
Benchmark	10	20

	Glos t=0 day @ 20°C	s (20°) t=28 day @ 50°C	Gloss t=0 day @ 25°C	s (60°) t=28 day @ 50°C	Distinctness t=0 day @ 25°C	of Image (DOI) t=28 day @ 50°C
Densurf DA 413	94.7	88.6	96.9	93.1	90.4	80.5
Benchmark	96.9	90.7	98.4	93.2	93.7	82.0





REMARKS



Excellent long-term performance in 2K PU acrylic topcoats



Safe in terms of pigment flocculation



Comparable gloss retention performance against a well-known benchmark product







Performance Test in **Epoxy Primers**



Densurf DA 413 was tested with a benchmark product in a epoxy primer formulation.

Viscosity, fineness of the grind values and gloss levels of the paints were checked before and after stability. For the stability tests, paints were stored in 50°C for 1 month.

Results are given below.

	Viscosity (mPas, @20°C) t=0 day @ 25°C	Viscosity (mPas, @20°C) t=28 day @ 50°C
Densurf DA 413	1200	5200
Benchmark	1200	12500

		s (85°) t=28 day @ 50°C
Densurf DA 413	26.7	24.4
Benchmark	31.6	31.4

	Fineness of grind (μ) t=0 day @ 25°C	Fineness of grind (µ) t=28 day @ 50°C
Densurf DA 413	20	25
Benchmark	20	30

Densurf DA 413

t=0 day @ 25°C

t=28 day @ 50°C



Benchmark

t=0 day @ 25°C

t=28 day @ 50°C



REMARKS



Excellent long-term performance in epoxy primers



Safe in terms of viscosity





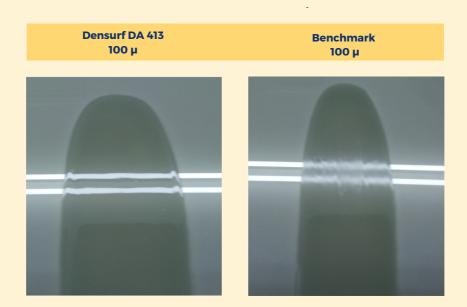


Densurf DA 413 was tested with a benchmark product in a 2K PU acrylic extender paste formulation.

Viscosity, fineness of the grind values of the paints were checked. Results are given below.

Viscosity (mPas, @20°C)		
Densurf DA 413	800	
Benchmark	1400	

Fineness of grind (μ)		
Densurf DA 413	25	
Benchmark	20	



REMARKS



Better DOI compared to the benchmark product.



Great viscosity reduction.

