



COATINGS

OXITIVE[®] 8000 SERIES

DISPERSING AGENTS FOR
WATERBORNE PIGMENT
CONCENTRATES



OXITENO

Evolution by chemistry

A broad range of dispersing agents designed to maximize pigment load and tinting strength of waterborne pigment concentrates, ensuring compatibility with different paint systems, performance and stability under different temperatures.



BENEFITS

- Reduces viscosity, maximizes pigment load and tinting strength
- Enhances stability and reduces rub-out
- Enables the formulation of low-VOC pigment concentrates
- Available grades for different types of pigments
- Compatibility with waterborne and alkyd solvent-borne decorative systems
- Available grades for Universal pigment concentrates



FEATURES

- Package: Sample, Drum, Bulk

PRODUCT	APPEARANCE @25°C	SOLIDS (wt %)	HLB	CMC (g/L)	SURFACE TENSION, 0.1% @25°C (mN/m)
OXITIVE® 8201	Liquid or paste	~100	13.5	0.02	43.1
OXITIVE® 8216	Liquid	~100	12.7	0.01	40.8
OXITIVE® 8225	Solid	~100	14.5	0.03	45.9
OXITIVE® 8254	Solid	~100	17.0	0.66	44.6
OXITIVE® 8123	Liquid	~98	-	0.04	43.7
OXITIVE® 8125	Liquid	~45	-	0.06	43.3





FEATURES

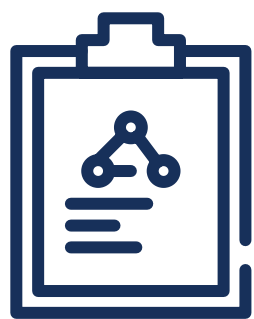
- Package: Sample, Drum, Bulk

PRODUCT	FUNCTION			PIGMENTS				APPLICATION		PERFORMANCE ¹			
	Dispersing agent	Wetting agent	Compatibilizer agent	Carbon Black	Organic	Inorganic	Titanium Dioxide	Waterborne systems	Alkyd solvent-borne system	Dispersant demand ²	Viscosity reduction ³	Tinting strength ⁴	Reduced rub-out ⁵
OXITIVE® 8201	○	○	○	○	○			○	○	●●	●●●	●●●	●●●
OXITIVE® 8216	○	○	○	○	○			○	○	●●	●●●	●●	●●
OXITIVE® 8225	○			○	○			○		●	●●	●	●
OXITIVE® 8254	○			○	○			○		●	●	●	●
OXITIVE® 8123	○			○	○	○	○	○	○	●●●	●●	●	●
OXITIVE® 8125	○			○	○			○		●	●●	●	●

○ recommended use | ● standard performance | ●● good performance | ●●● excellent performance

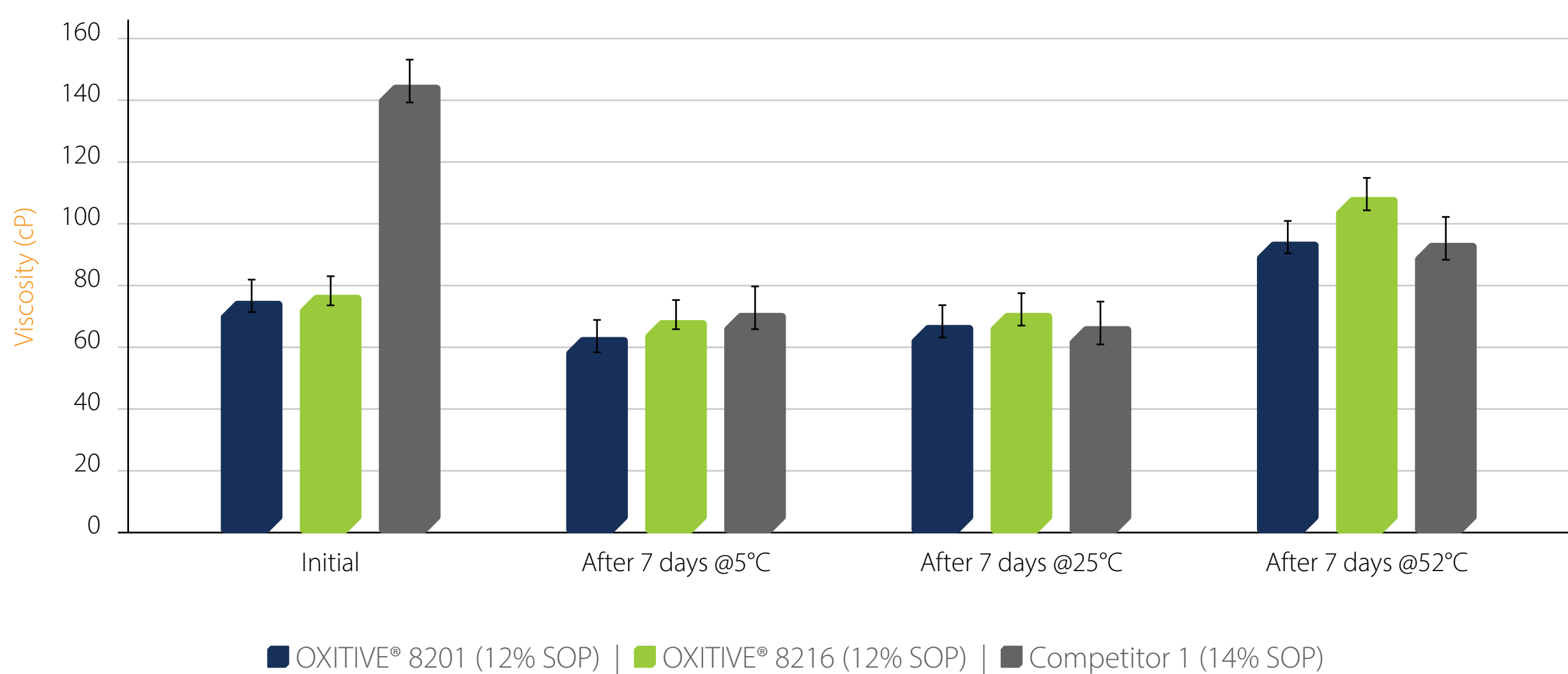
¹For the comparative evaluation among the products, the tests were performed with a carbon black pigment – Monarch® 430, CABOT.
²Solids dispersant demand for dispersing the same amount of pigment on weight.
³Viscosity measurements after 24 hours of pigment concentrates preparation – Brookfield DV2TLVTJ10.
⁴Tinting strength was evaluated dosing 2.0 wt% of pigment concentrates on a matte acrylic paint. OXITIVE® 8201 was adopted as the standard.
⁵Collor difference (ΔE) between an unrubbed and rubbed area.



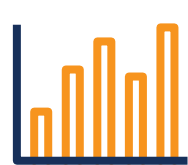


PERFORMANCE TESTS

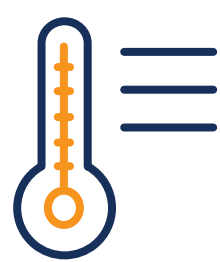
Dispersant dosage, viscosity and thermal stability



Competitor 1 is an aromatic modified polyethyleglycol ether in aqueous solution, 90% solids.
SOP = Surfactant on Pigment concentration (wt/wt)



Using lower dosages, **OXITIVE® 8000** dispersing agents improve viscosity reduction.



Pigment concentrates prepared with **OXITIVE® 8000** dispersing agents present excellent viscosity stability under different temperatures.

Pigment Concentrate Formulation

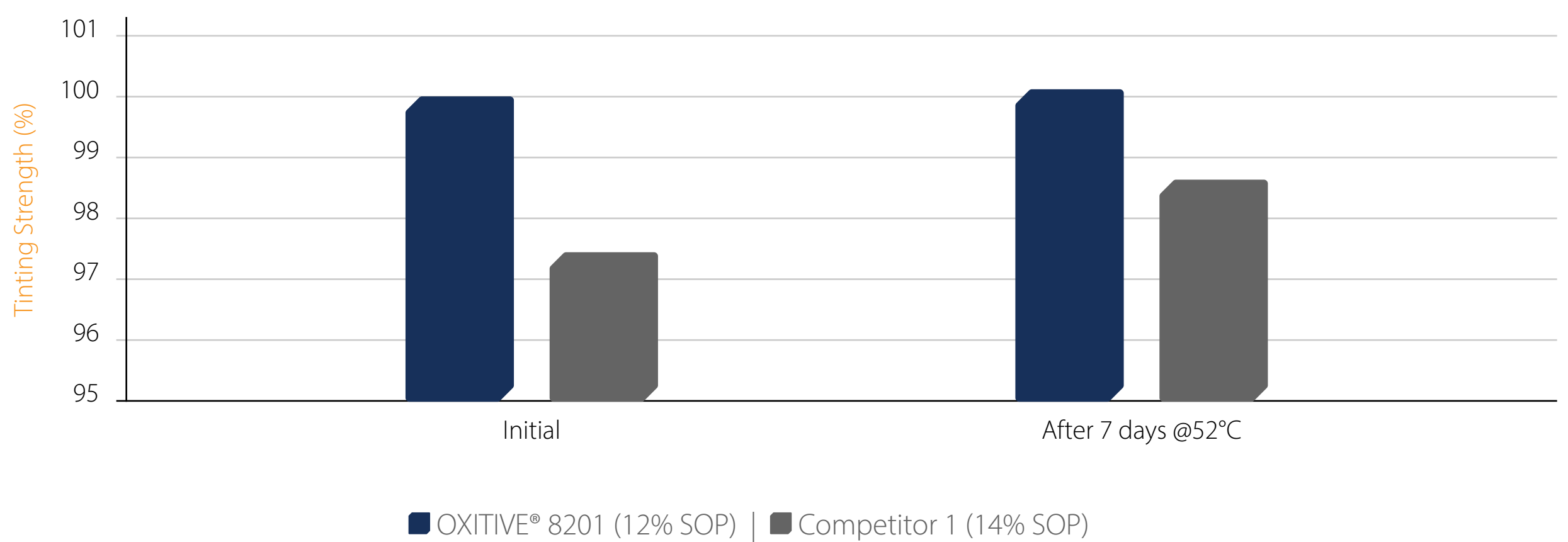
COMPONENT	% (WEIGHT)
Water	54.4 – 55.3
Dispersing agent*	5.1 – 6.0
Defoamer	0.3
Biocide	0.2
Pigment – Monarch® 430	40.0

*The dispersing agent dosage was adjusted for each evaluated product considering the optimum SOP dosage determined on a viscosity curve and the solids content.



PERFORMANCE TESTS

Performance and stability



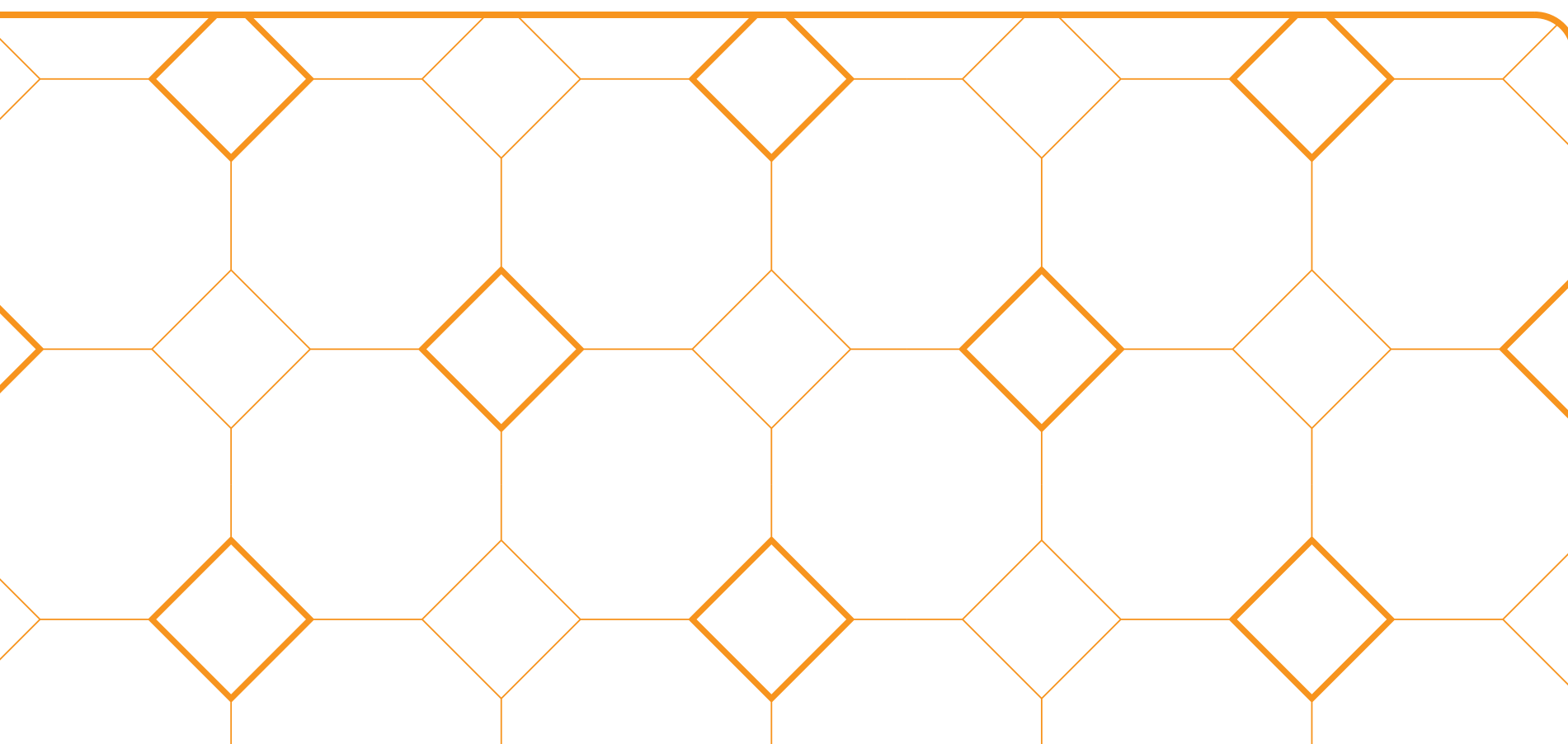
Competitor 1 is an aromatic modified polyethyleglycol ether in aqueous solution, 90% solids.

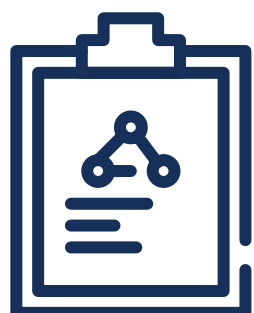


Pigment concentrates prepared with **OXITIVE® 8000** dispersing agents present higher tinting strength and excellent performance maintenance during storage.

Test conditions

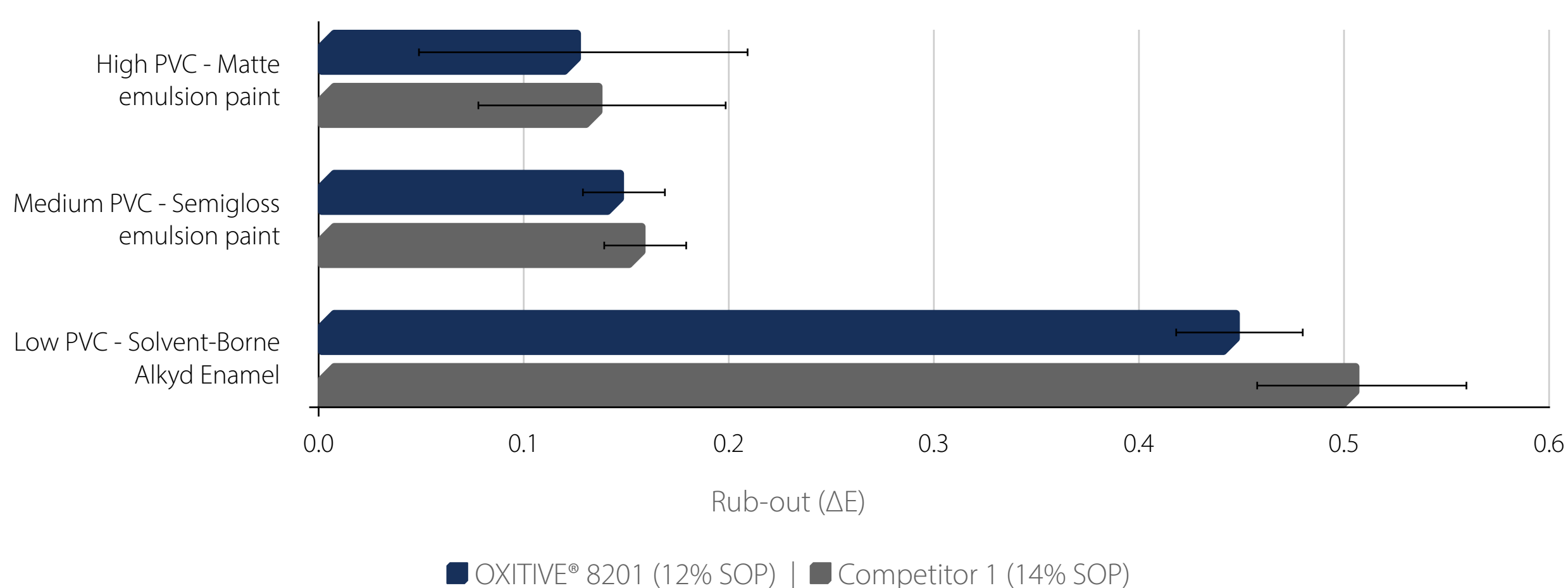
- Paint evaluated: waterborne acrylic matte paint
- Pigment concentrate incorporated at 2.0 wt%
- Initial evaluation was done with pigment concentrate kept for 24 hours at RT after production
- Final evaluation was done with pigment concentrate kept for 7 days @52°C after production
- Baseline adopted (100%) for tinting strength evaluation – Initial tinting strength for OXITIVE® 8201





PERFORMANCE TESTS

Compatibility with different systems



Competitor 1 is an aromatic modified polyethyleglycol ether in aqueous solution, 90% solids.

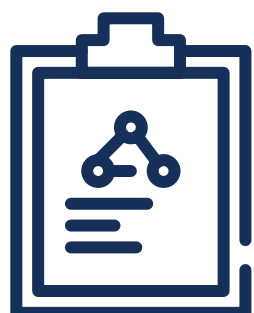


Pigment concentrates prepared with **OXITIVE® 8000** dispersing agents present good compatibility with different systems, including alkyd solvent-borne systems.

Test conditions

- Pigment concentrate incorporated at 2.0 wt% on different systems
- The evaluation was done after pigment incorporation on the paints





PERFORMANCE TESTS

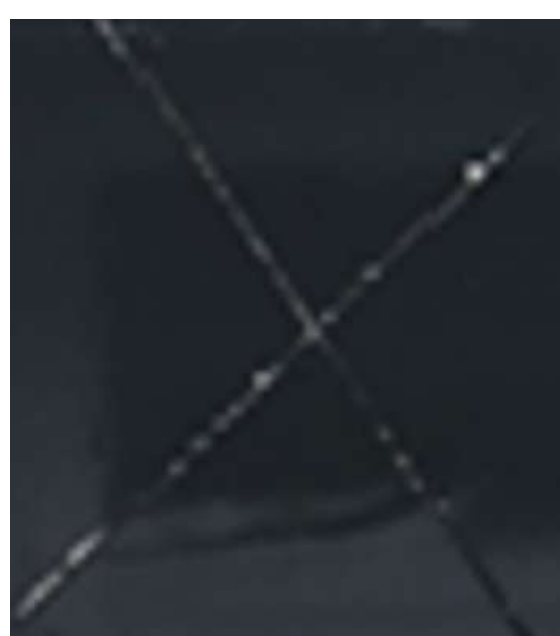
Pigment concentrates prepared with OXITIVE® 8000 dispersing agents present low impact on final coatings properties

ALKYD SOLVENT-BORNE ENAMEL

Adherence evaluation according to ASTM D3359 – Method A



White base



Tinted with
OXITIVE® 8201

WATERBORNE ACRYLIC SEMIGLOSS PAINT

Leaching evaluation according to ASTM D7190

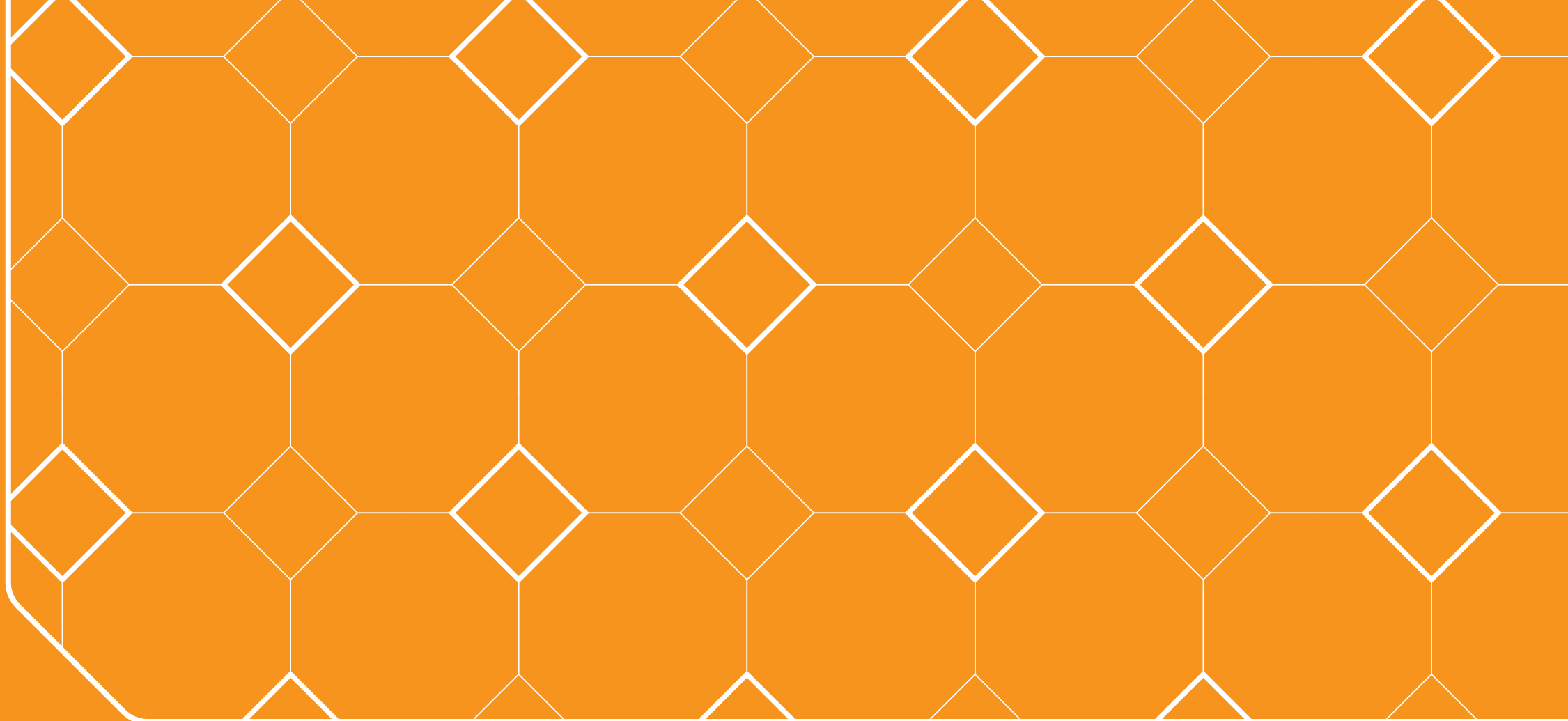


White base



Tinted with
OXITIVE® 8216





If you are looking for dispersing agents
for waterborne pigment concentrates,
OXITIVE® 8000 SERIES is what you need!
Contact us and request a sample.



oxiteno.com/us/en/contact/



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