



**ADDAPT**  
*Chemicals BV*



for tomorrow's  
Technology

**ADDISP™**

Wetting & Dispersing Additives



for tomorrow's

World

## ADDISP™ 250 & ADDISP™ 600N

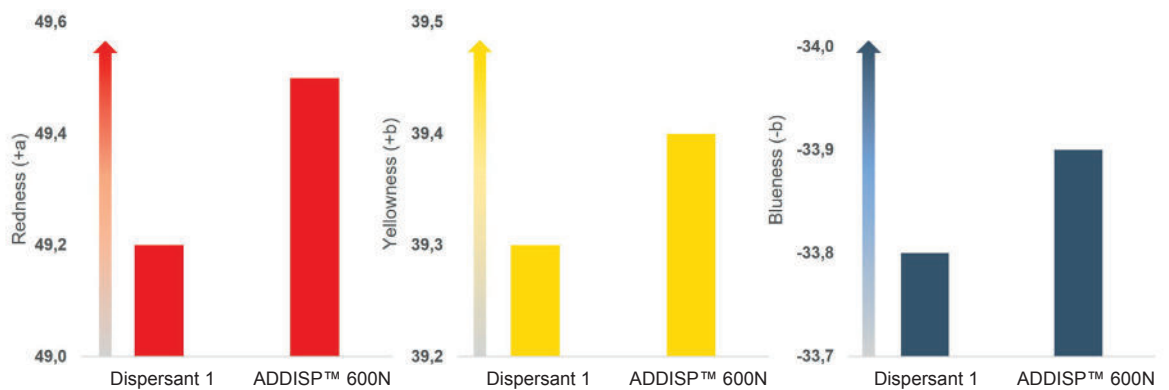
ADDISP™ 250 and ADDISP™ 600N are modified polyacrylate dispersants that provide excellent pigment stabilisation of fillers and especially titanium dioxide. Pigment-affinic anchoring groups provide improved wet scrub and rub-out properties. Due to the incorporation of specific moieties in its molecular structure, excellent hard water resistance is achieved.

	ADDISP™ 250	ADDISP™ 600N
Appearance	Clear liquid	Clear liquid
Viscosity at 25 °C	<100 mPa·s	<250 mPa·s
Density at 25 °C	1.15 – 1.19 g/cm <sup>3</sup>	1.26 – 1.31 g/cm <sup>3</sup>
Solid content	24.5 – 25.5%	39.0 – 41.0%
Molecular weight	Approx. 3200 g/mol	Approx. 3200 g/mol
Solubility water	Soluble	Soluble
Residual monomer	<100 ppm acrylate	<100 ppm acrylate
Shelf life	12 months	12 months

### Benefits

- ADDISP™ 250 and ADDISP™ 600N are recommended for use in formulations with medium to high PVC (30 - 80%)
- The gloss of emulsion paint and lacquers is not influenced by the addition of ADDISP™ 600N
- In comparison with most dispersants, the abrasion values are significantly lower
- ADDISP™ 600N optimises the absorption of tinting pastes for emulsion paints

### Improved colour uptake



Colour development in white base paint formulations with ADDISP™ 600N and a market reference dispersant were evaluated. The dosage of pigment paste to white base paint was 5%. The tinted white base paint with ADDISP™ 600N shows improvement in the colour uptake from the colourant, resulting in higher a or b values measured according to CIELAB colour space.

*The use of polyphosphates should be omitted under all circumstances when using ADDISP™ 600N as the effect of polyphosphates is detrimental to the performance of ADDISP™ 600N.*

## ADDISP™ 850 & ADDISP™ 550

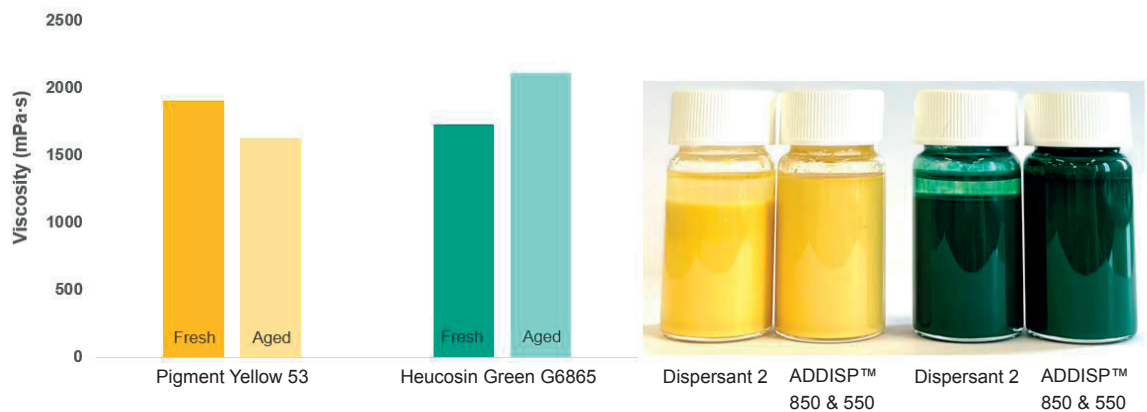
ADDISP™ 850 is a surface-active amphoteric dispersing agent, which can be used in combination with wetting agent ADDISP™ 550. ADDISP™ 550 is a non-ionic pigment wetting agent that also acts as a post-add wetting agent and compatibiliser. Both additives are biodegradable, APEO, solvent and VOC-free.

	ADDISP™ 550	ADDISP™ 850
Appearance	Yellowish transparent liquid	Yellowish transparent liquid
Viscosity at 25 °C	<250 mPa·s	<50 mPa·s
Density at 25 °C	1.08 – 1.12 g/cm <sup>3</sup>	1.14 – 1.18 g/cm <sup>3</sup>
Solid content	100%	40 – 45%
Solubility water	Soluble	Soluble
Shelf life	12 months	12 months

### Benefits

- Biodegradable and sustainable additives
- ADDISP™ 850 is non-foaming, especially in the mill base
- Disperse wide a variety of pigments, suitable for inorganic, organic, iron oxides, etc.
- Offers improved stability for pigment pastes

### Improve paste storage stability with ADDISP™ 850 & 550



*Pigment pastes were stored for two weeks at 50 °C, after the aging process no sedimentation or creaming was found.*

## ADDISP™ 950

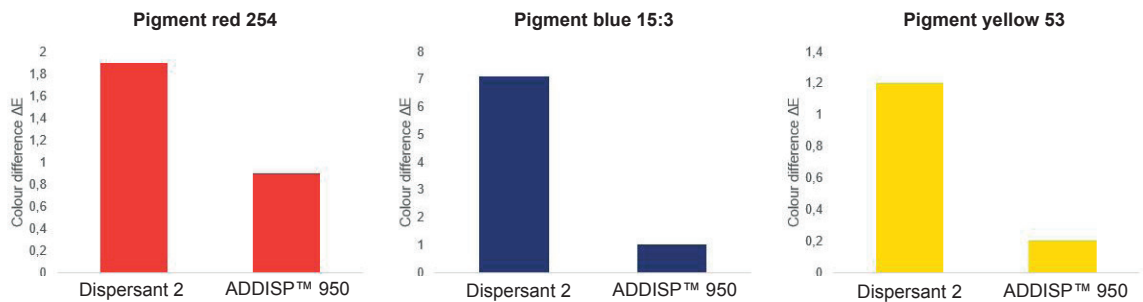
Versatile non-ionic wetting and dispersing additive for high-grade resin-free pigment pastes, suitable for both waterborne and solventborne applications. ADDISP™ 950 is APEO and VOC-free and a high-molecular-weight non-ionic additive. It is highly effective in dispersing organic pigments and carbon blacks.

ADDISP™ 950	
Appearance	Slightly yellowish liquid
Viscosity at 25 °C	<500 mPa·s
Density at 25 °C	1.00 – 1.05 g/cm <sup>3</sup>
Solid content	100%
Solubility water	Dispersible
Shelf life	12 months

### Benefits

- Universal dispersant, suitable for water-, solvent- and UV-systems
- Efficient milling with ADDISP™ 950 improves colour development of colourants
- Disperse a wide variety of pigments, suitable for inorganic, organic, iron oxides, etc.
- Offers improved stability through steric stabilisation, reduces flocculation and flooding
- No pearl mill necessary, dissolver only

### Colour differences in rub-out area



The colour differences in the rub-out area are smaller with ADDISP™ 950 compared to the reference dispersant. This indicates that the pigment particles were better dispersed and stabilised with ADDISP™ 950.

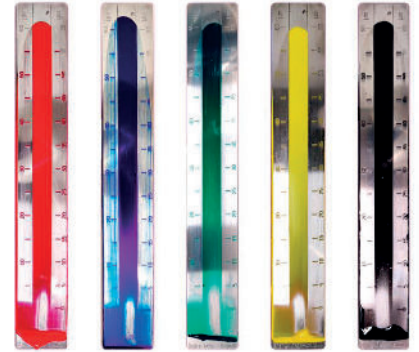
## ADDISP™ ECO

ADDISP™ ECO is a universal reactive pigment dispersant partially sourced from biomass. As a 'One for All' solution, ADDISP™ ECO excels in preparing organic and inorganic pigment concentrates with particle sizes below 5 microns by using only a dissolver. The pigment preparations that are formulated using ADDISP™ ECO can be used for solvent-borne, water-borne and UV applications. It can be used to disperse a wide range of organic, inorganic, carbon black and titanium dioxide pigments, but also fillers and silicas.

ADDISP™ ECO	
Appearance	Clear orange/brown liquid
Viscosity at 25 °C	<3000 mPa·s
Density at 25 °C	1.02 – 1.08 g/cm <sup>3</sup>
Solid content	Approx. 96%
Solubility water	Soluble
Shelf life	12 months

### Benefits

- No pearl mill necessary, dissolver only
- One for all pigment dispersant
- Suitable for inorganic, organic, carbon black and various fillers
- Suitable for water-, solvent & UV-based applications
- Reduction of manufacturing costs & waste
- Lower investment costs
- Readily biodegradable and partly biobased product



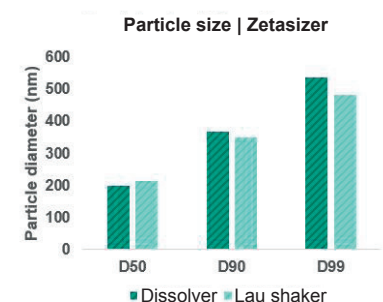
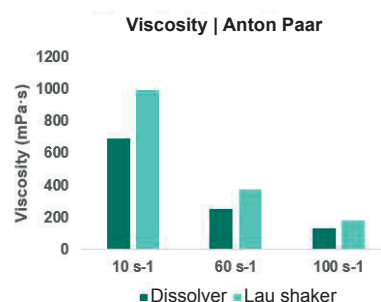
### Dissolver vs pearl mill

Using a dissolver instead of a ball or pearl mill saves a lot of energy, chemicals, labour and thus costs. This does not only result in benefits for the environment but also financially.

To demonstrate the similarity between pigment preparations prepared with a dissolver and Lau shaker (pearl mill), a comparison study with pigment yellow 74 was performed with the ADDISP™ ECO dispersant.

PY74 Sudajet Yellow 5311D	
ADDISP™ ECO	10.5
Sudajet Yellow 5311D	20.0
Propylene glycol	20.0
Defoamer	1.0
Water	48.5
Total	100.0

Dissolver	Lau shaker
300 g pigment paste	100 g pigment paste
3000 rpm	300 g Sili beads
90 minutes	90 minutes



## Application Scheme

Pigment type	ADDISP™ 250	ADDISP™ 600N	ADDISP™ 850 + 550	ADDISP™ 950	ADDISP™ 950 + 550	ADDISP™ ECO	Anticor™ CBA 63
TiO <sub>2</sub>	●	●	●	□	□	●	
Fillers	●	●	●			●	
Silica's (matting agents)						●	
Iron oxides	●	●	●	✘	●	●	
Inorganic	●	●	●	✘	●	●	
Organic			●	●	●	●	
Carbon black			□	✘	●	●	
Fluorescent				✘		●	
Metallics							●
Water-based applications	●	●	●	●	●	●	●
Solvent-based applications				●	●	●	●
Resin-free systems	●	●	●	●	●	●	●
UV-systems				●		●	
Active content (%)	±25	±40	±51	±100	±100	±96	±92
VOC-free	✓	✓	✓	✓	✓	✓	
Readily biodegradable			✓	✓	✓	✓	✓
Partly biobased			✓			✓	

● Highly recommended

✘ Recommended

□ Suitable

## CONTACT INFORMATION

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