

RHEOBYK-7600

VOC-free associative thickener (HEUR) for aqueous systems to generate a highly pseudoplastic flow behavior.



RHEOBYK-7600

Overview

The addition of pigment concentrates in a basic paint to achieve the desired color can cause problems with regard to rheological behavior. Any co-solvents, imported water or wetting and dispersing additives contained in the pigment concentrates can bring about a significant reduction in the viscosity of the finished paint.

To avoid this effect, with RHEOBYK-7600, BYK is offering a unique associative thickener based on a new technology. RHEOBYK-7600 leads to a considerable increase in the viscosity in the low shear range, stabilizes the viscosity when the colorant is added, and improves the color paste acceptance.

The rheological properties are comparable with those of RHEOBYK-TVS HEAT technology. The new additive also offers a significantly better leveling properties. As well as being VOC-, APEO-, and tin-free, RHEOBYK-7600 is also liquid, which facilitates incorporation and handling. Due to its composition, it is highly compatible in many aqueous systems. The sagging tendency and the storage stability are improved. It is not necessary to adjust the pH value or control the temperature during incorporation. Combining with rheology additives, which are effective in the high shear range, optimizes processability.

RHEOBYK-7600

Product Composition

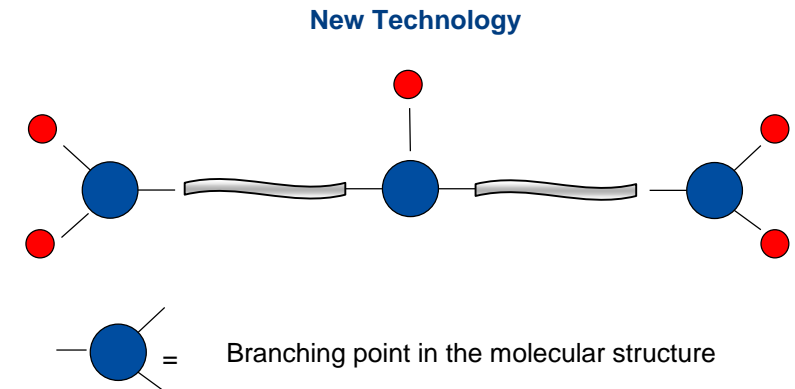
VOC-free associative thickener (HEUR) for aqueous systems to generate a highly pseudoplastic flow behavior.

Chemical Composition

Solution of a hydrophobically modified polyurethane

Product Composition

Active Substance	15%
Density at 20°C	1,05 g/cm ³
Flash point	> 100°C
Solvent	Water



RHEOBYK-7600

Outstanding Benefits

- ✓ Excellent viscosity stability after tinting
- ✓ Great sag/flow balance - enhanced leveling properties
- ✓ Improvement of colorant acceptance
- ✓ Improvement of sag resistance and anti-settling properties
- ✓ Good system compatibility
- ✓ Easy handling and incorporation, due to its viscosity
- ✓ VOC-, APEO-, Tin-free

RHEOBYK-7600

Product Composition

Recommended Levels

0.3 – 2.0 % additive (as supplied) based upon the total formulation depending on the properties of the formulation to be achieved.

Incorporation and Processing Instructions

Addition under stirring ensures optimum distribution and the best possible effectiveness and reproducibility in applications.

RHEOBYK-7600 is suitable for adding

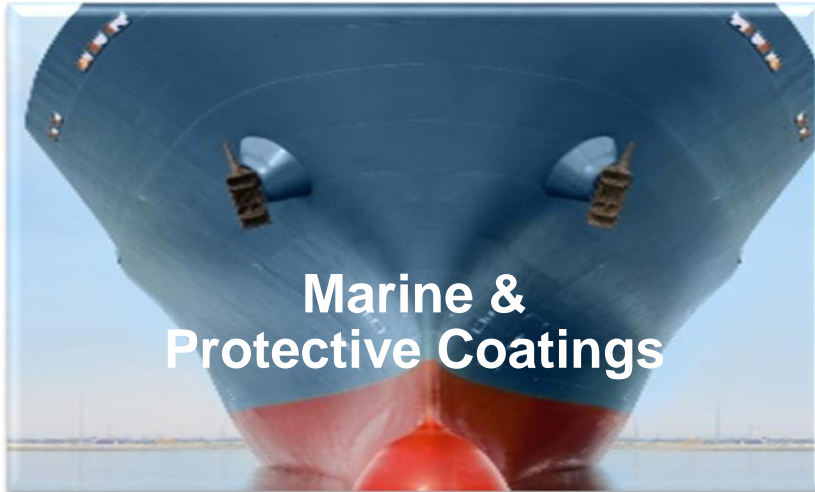
- to the millbase
- to the letdown product
- as a post additive

to retroactively adjust the rheological properties.

Applications



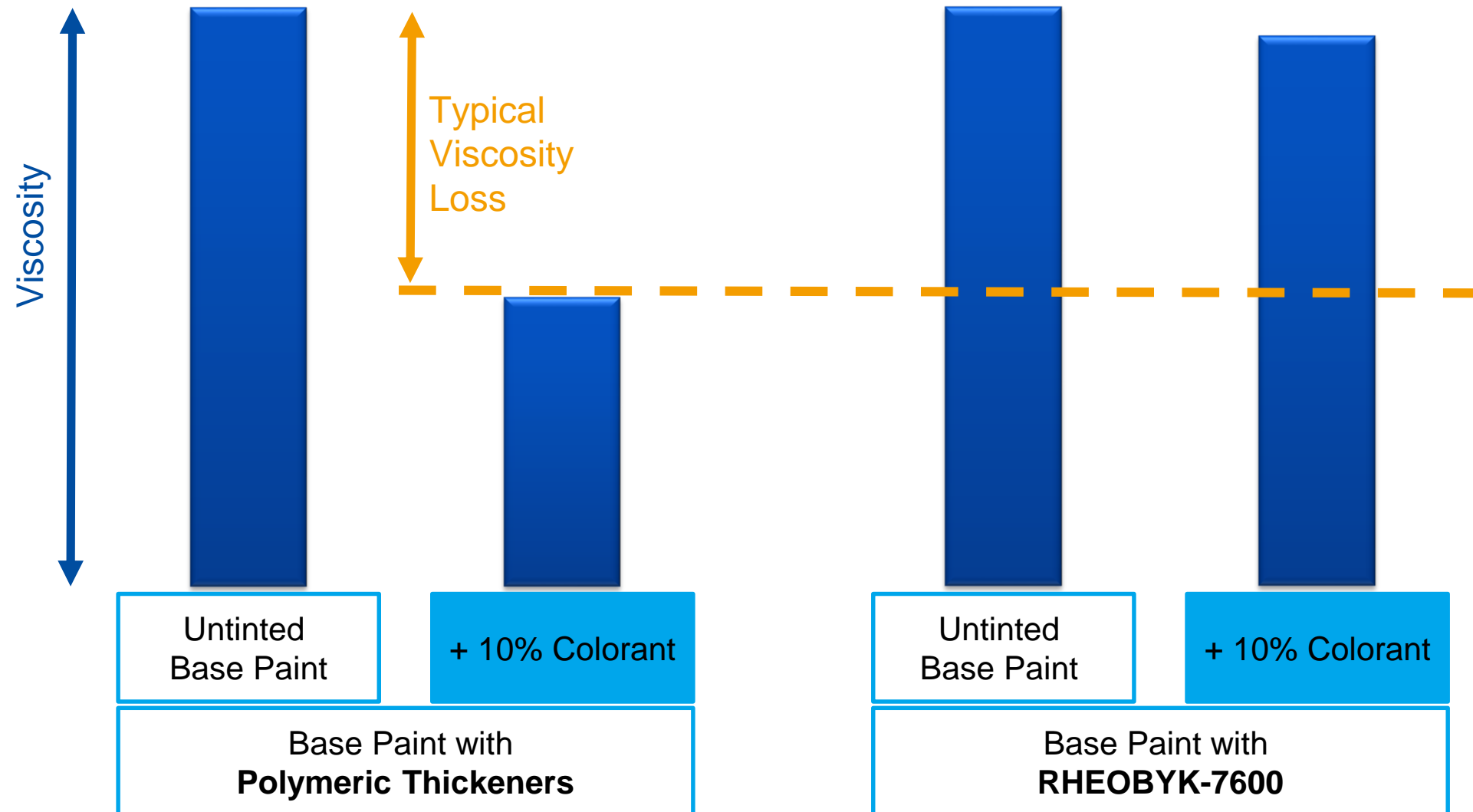
Recommended



Suitable

RHEOBYK-7600

Theory of Viscosity Stability after Tinting



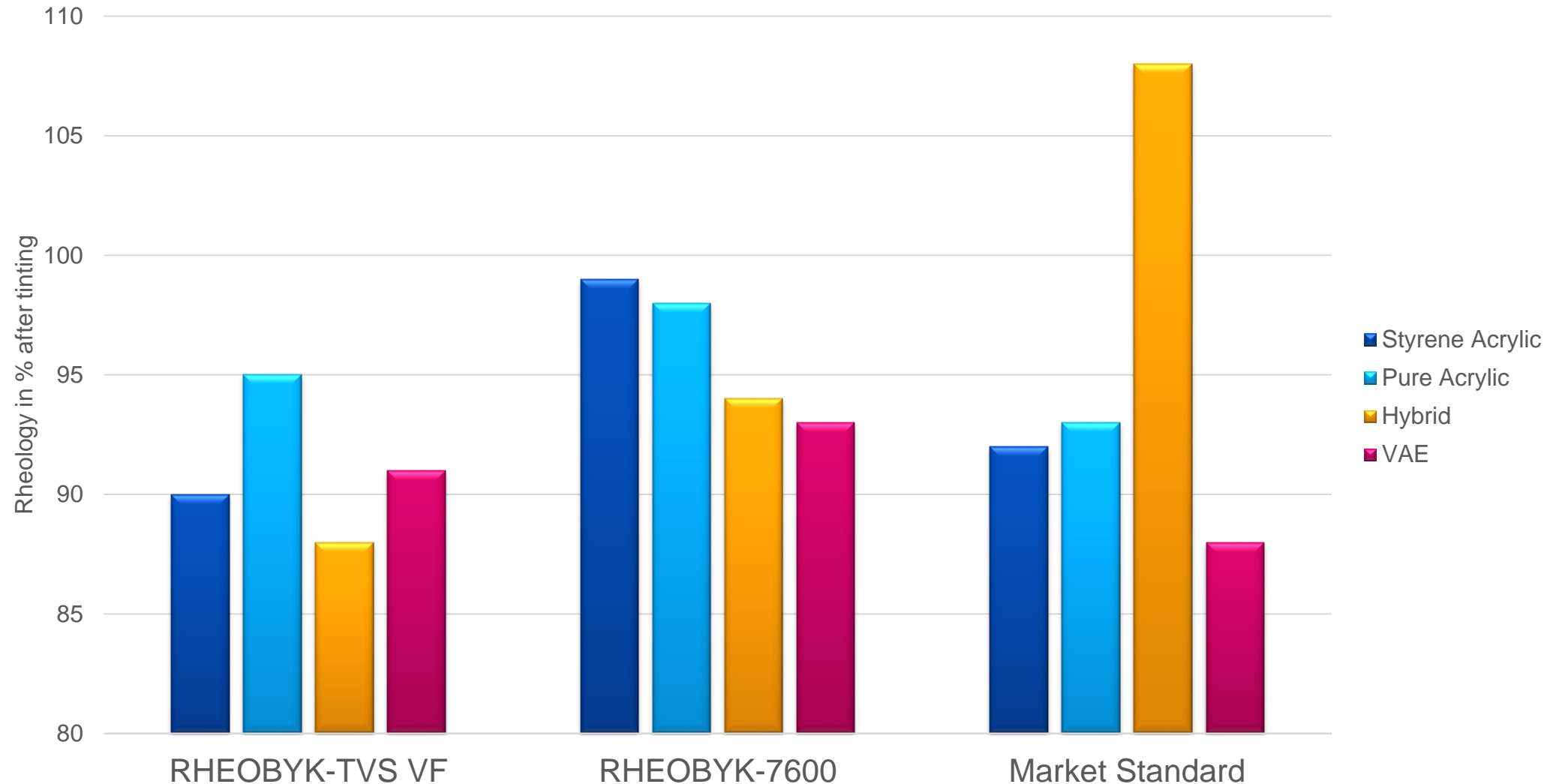
RHEOBYK-7600

Excellent Viscosity Stability after Tinting

Rheology in %
Comparison Base Paint
untinted vs. tinted

Tinting
w/b blue Pigment Concentrate
97:3

Rheology Measurement
By Anton Paar
% calculated
(0.25 – 1000 1/s)



RHEOBYK-7600

Excellent Viscosity Stability after Tinting

Test System

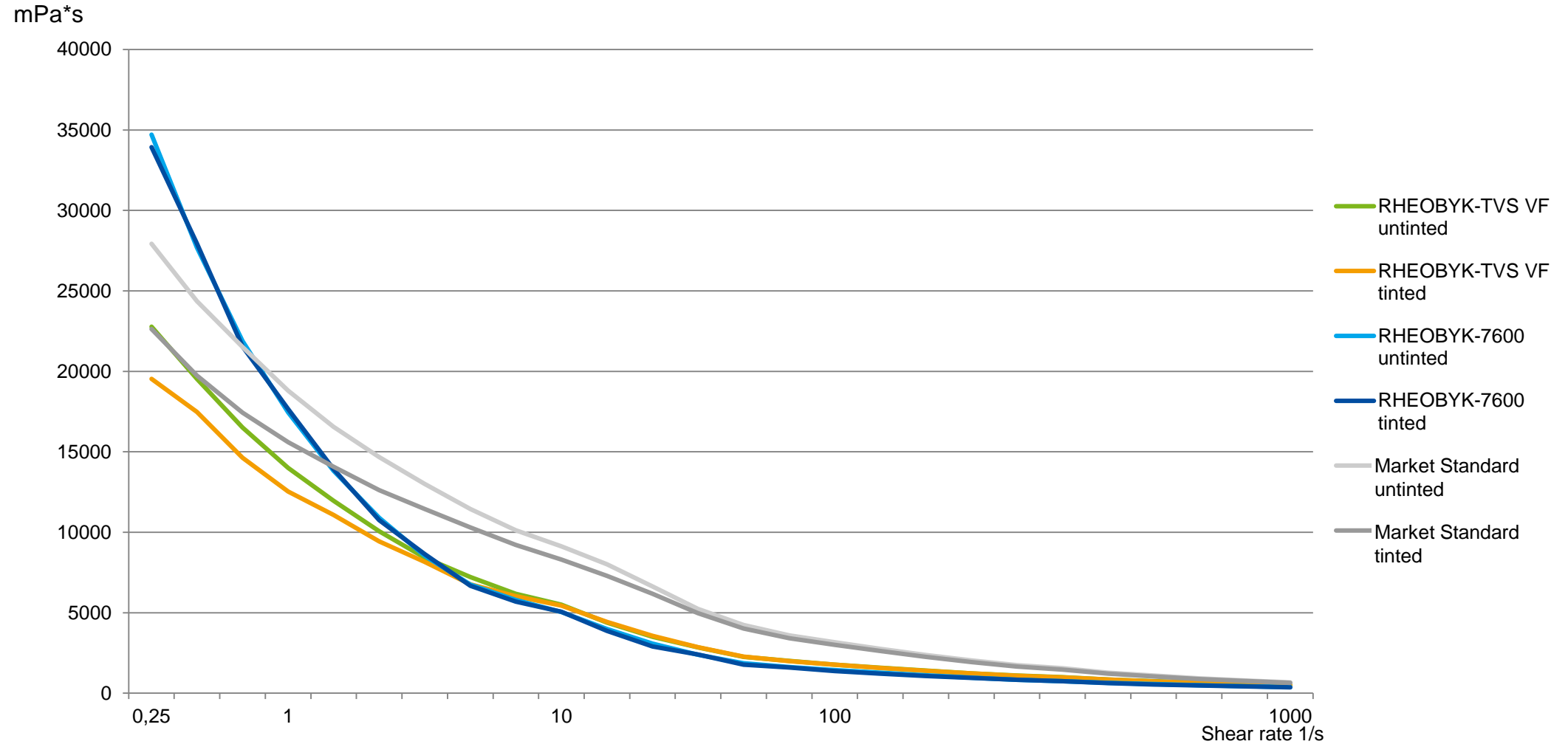
Pure Acrylic
PVC 19%

Dosage

0.1% active substance on
total formulation

Tinting

w/b blue Pigment Concentrate



RHEOBYK-7600

Improvement of Colorant Acceptance

Dosage

0.1% active substance on
total formulation

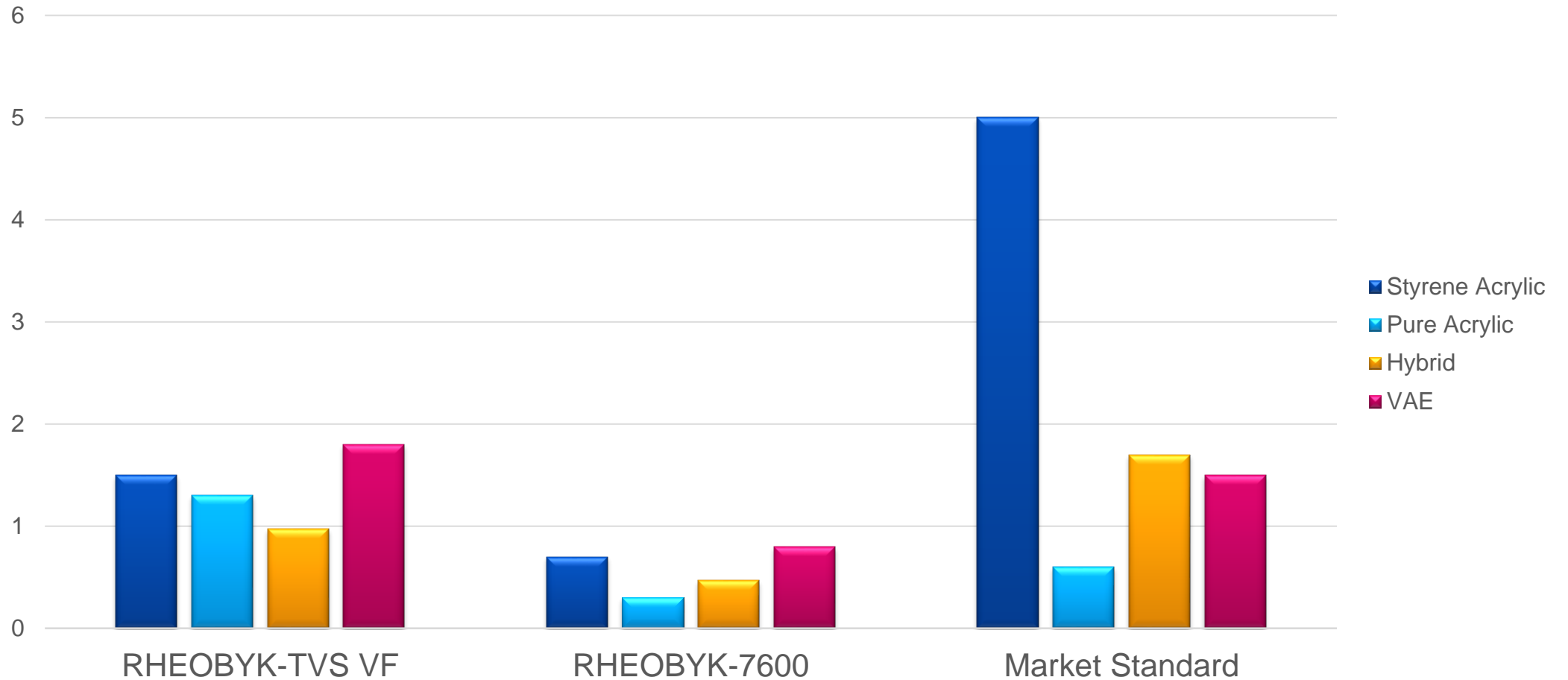
Tinting

w/b blue Pigment Concentrate
97:3

Test Method

Rub-out

ΔE -Values



RHEOBYK-7600

Improvement of Colorant Acceptance after Storage

Test System

Pure Acrylic
PVC 19%

Dosage

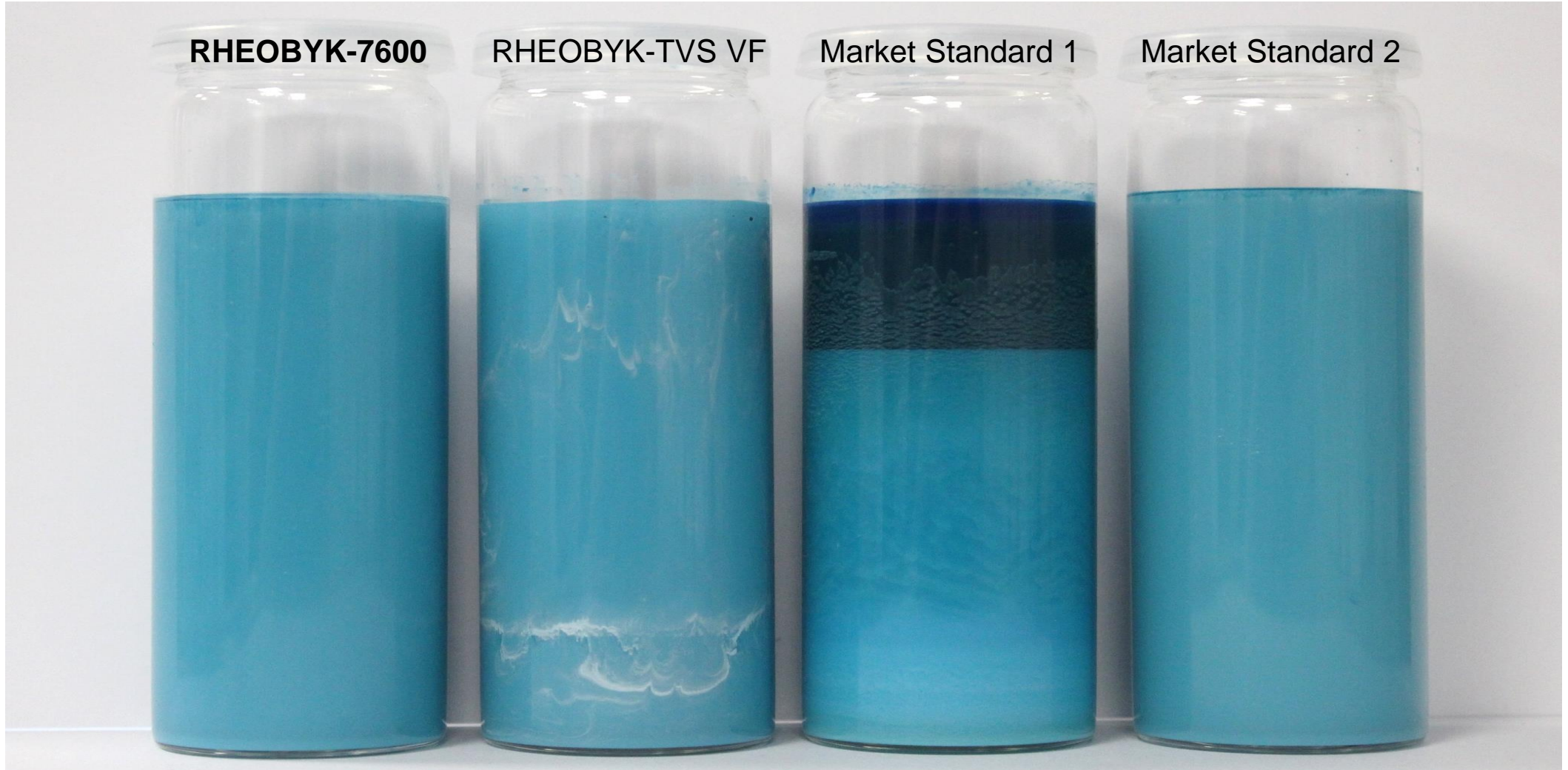
0.1% active substance on
total formulation

Tinting

w/b blue Pigment Concentrate
97:3

Storage

14 days
50°C



RHEOBYK-7600

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- ✓ Improvement of sag resistance and anti-settling properties
- ✓ Good system compatibility
- ✓ VOC-, APEO-, Tin-free

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