

## BYK-3680

VOC- and PFAS-free surface additive, providing excellent anti-blocking performance for aqueous architectural paints and tint bases.\*

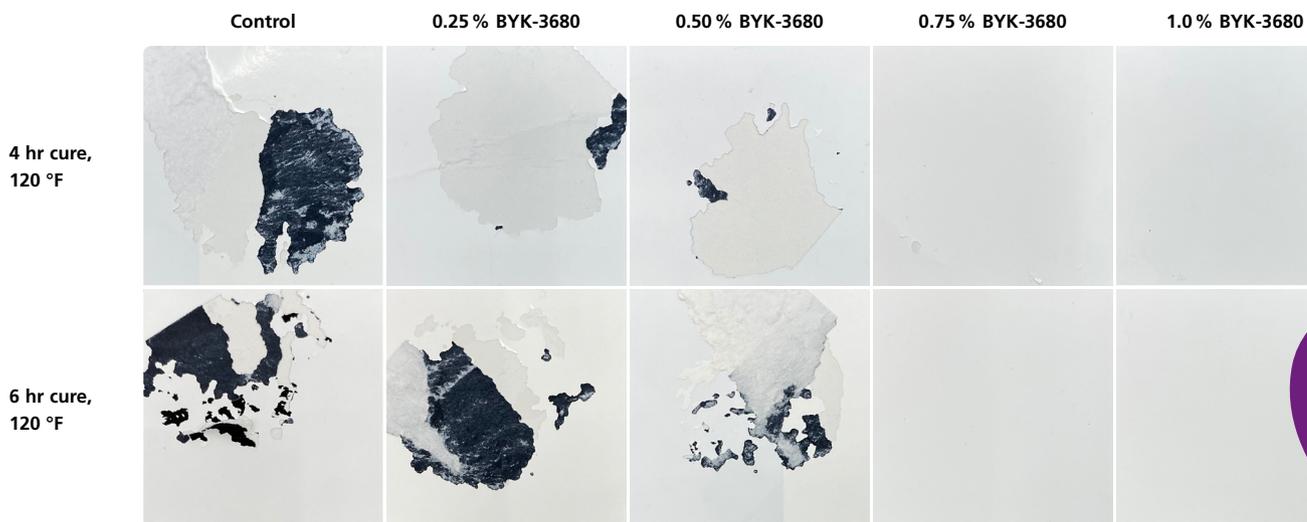
Block resistance refers to a paint's ability to resist sticking to itself when two freshly painted surfaces come into contact under pressure, like a window sticking to its frame. Without anti-blocking additives, painted surfaces can stick together, especially under pressure or heat, leading to unwanted adhesion and defects of the painted surface. Anti-blocking additives often include waxes or per- and polyfluoroalkyl substances (PFAS).

BYK-3680 is a salt of a phosphoric acid ester that provides anti-blocking performance in aqueous systems, with excellent early property development even at elevated temperatures as high as 120 °F (50 °C). The additive has no significant influence on the surface slip and at the same time does not reduce the gloss of the system. In addition, BYK-3680 shows an excellent color acceptance performance.

### Benefits

- Excellent anti-blocking performance (early and hot block)
- No gloss reduction
- No significant impact on surface slip
- Excellent color acceptance
- Suitable for combination with waxes
- VOC- and PFAS-free

BYK-3680 provides excellent early hot block resistance



**Test system:** Aqueous acrylic emulsion topcoat based on Alberdingk AC 2305 without additive (control) or with increasing additive concentration based on the total formulation.

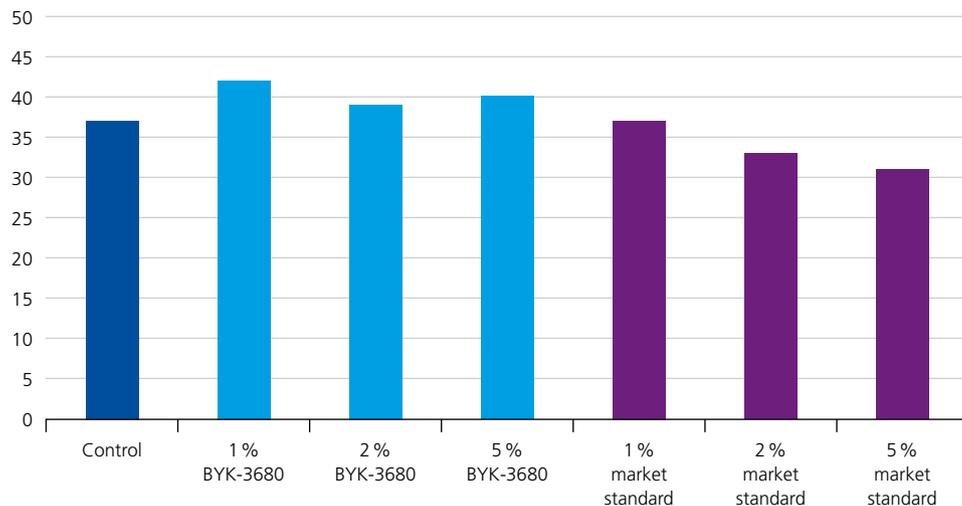
**Test method:** Application of the samples onto byko-chart black scrub panel (150 µm). After 4 h or 6 h after the application, the samples were cut into 5 x 5 cm pieces. The coated sides were placed on top of each other. A 1 kg weight was placed on top of the pieces for 24 hrs at 120 °F. The samples were cooled down to RT and peeled apart in one quick movement.

Dosage ladder evaluation is strongly recommended, as a lower dosage may offer optimal performance in some systems.

\* Only available in North America

## BYK-3680 – No gloss reduction even with overdosing

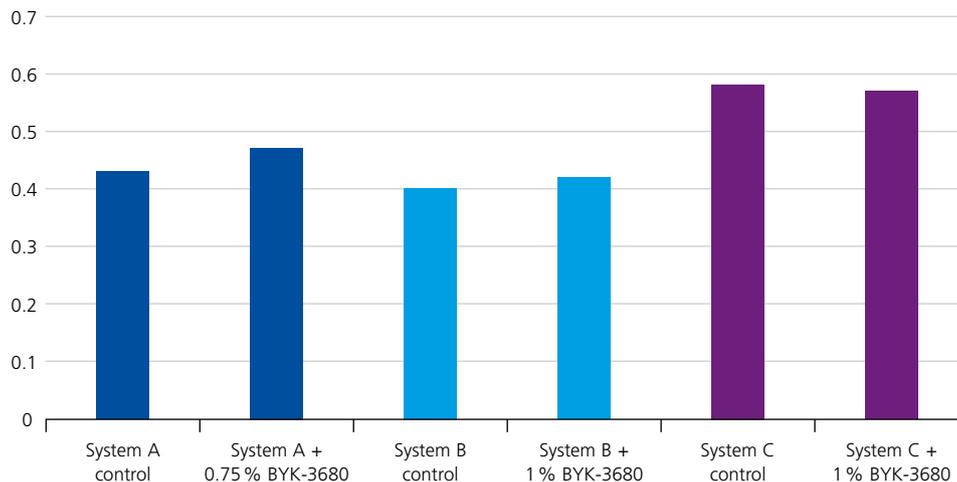
### Gloss units (60°)



**Test system:** High gloss acrylic emulsion topcoat based on Alberdingk AC 2025 without additive (control) or with increasing additive concentration based on the total formulation

## BYK-3680 – No significant impact on surface slip

### COF



**Test system:** Aqueous acrylic emulsion topcoat based on Alberdingk AC 2305 (A), based on Acronal DS 6262 (B), or based on high PVC wall paint (C) without additive (control) or with additive

## Technical data

- Composition: salt of a phosphoric acid ester
- Density (20 °C): 1.20 g/cm<sup>3</sup>
- Non-volatile matter (10 min, 150 °C): 37 %
- Solvent: water
- Delivery form: liquid
- Dosage recommendation: 0.25–1.0 % additive (as supplied) based on the total formulation



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