BYK-3680

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

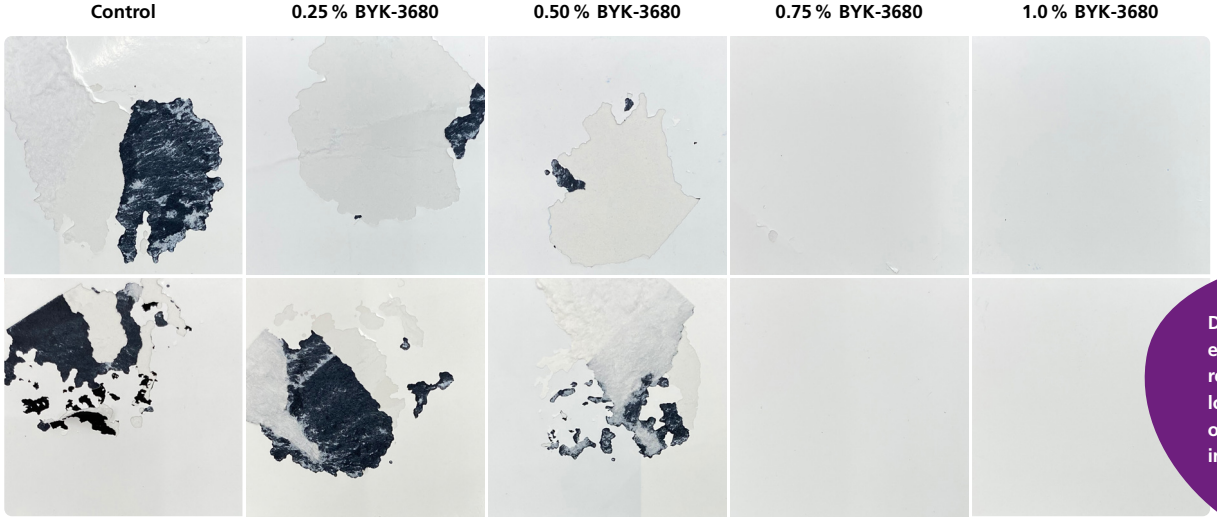
Block resistance refers to a paint's ability to resist sticking to itself when two freshly painted surfaces come into contact under pressure, like a window sticking to its frame. Without anti-blocking additives, painted surfaces can stick together, especially under pressure or heat, leading to unwanted 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



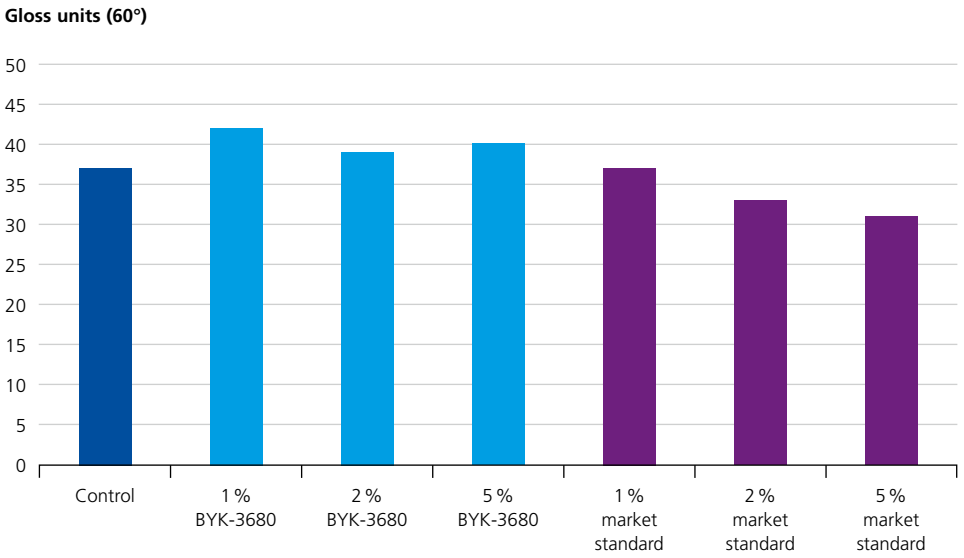
Test system: Aqueous acrylic emulsion topcoat based on Alberdingk AC 2305 without additive (control) or with increasing additive concentration based on the total formulation.

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.

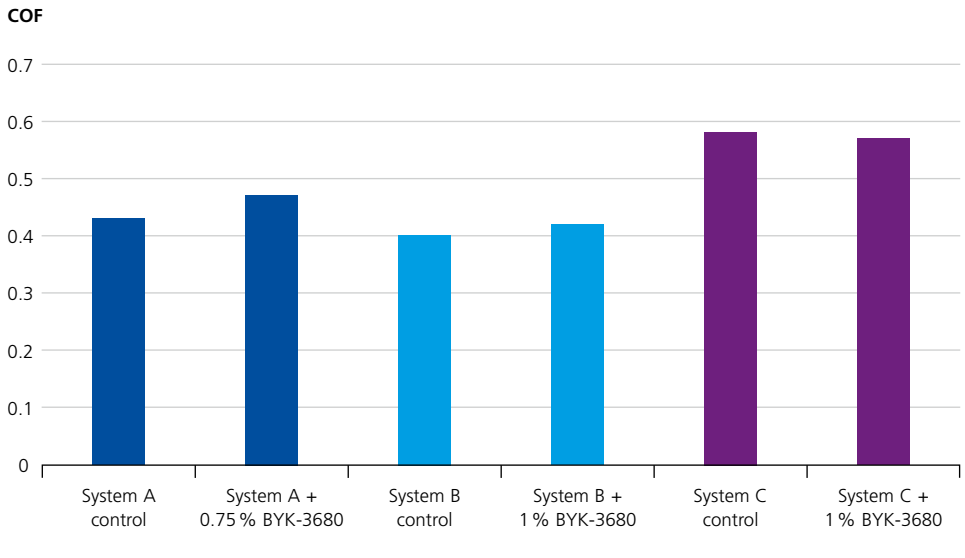
* Only available in North America

BYK-3680 – No gloss reduction even with overdosing



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



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/cm³
- 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

Your local contact

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