BYK
Additives & Instruments

BYK-3760

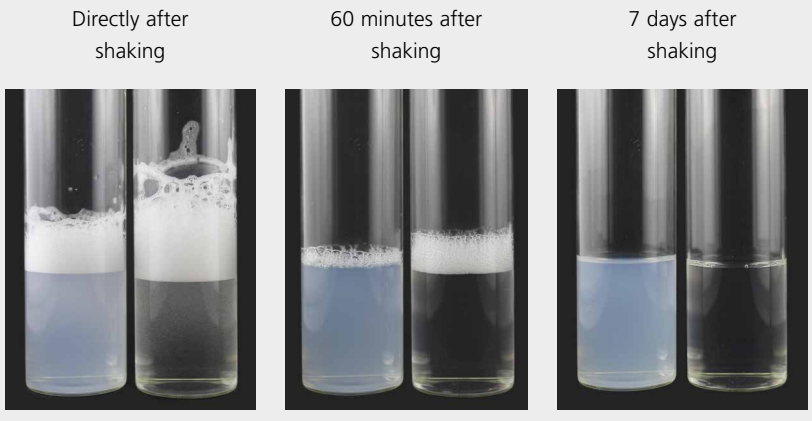
Highly Effective Silicone Additive for Aqueous, Solvent-borne, and UV-curing Systems

BYK-3670 is a unique, highly active polyether-modified polysiloxane. As a result of its low tendency to stabilize foam, BYK-3760 can also be used in applications that involve high shear forces. The additive remains fully effective, even at a very low dosage. At the same time, its outstanding compatibility means that it can be used in a wide variety of resin systems.

BYK-3760 is the first representative of a series of new silicone additives that run through an additional production step in which virtually all cyclic siloxanes are removed (D4–D6). As a result, BYK-3760 corresponds to the latest requirements of common ecolabels such as EU Ecolabel, Nordic Swan, Blauer Engel, as well as the specifications for use in food contact applications.

BYK-3760 is a modern, highly effective, and universal silicone additive which is produced according to the latest BYK technology standards.

BYK-3760 – Very Low Foam Stabilization



Notes: BYK-3760 has an emulsifying effect in water (highly compatible).
It is also highly effective in aqueous systems with a low proportion of co-solvents.
Test system and method: 30 ml water and 0.5 ml BYK-3760 is mixed in a cylinder and shaken manually. The foam formation or stabilization is evaluated.

Benefits

- Extremely strong reduction in surface tension
  → excellent anti-cratering properties
  → improved substrate wetting
  → high surface slip – low COF values
  → good scratch resistance
- Extremely low foam stabilization
  → significantly better than standard additives
- Extensive compatibility in a wide variety of systems
  → universal
- 100 % solid content
  → complies with the strict ecolabel requirements; labeling-free

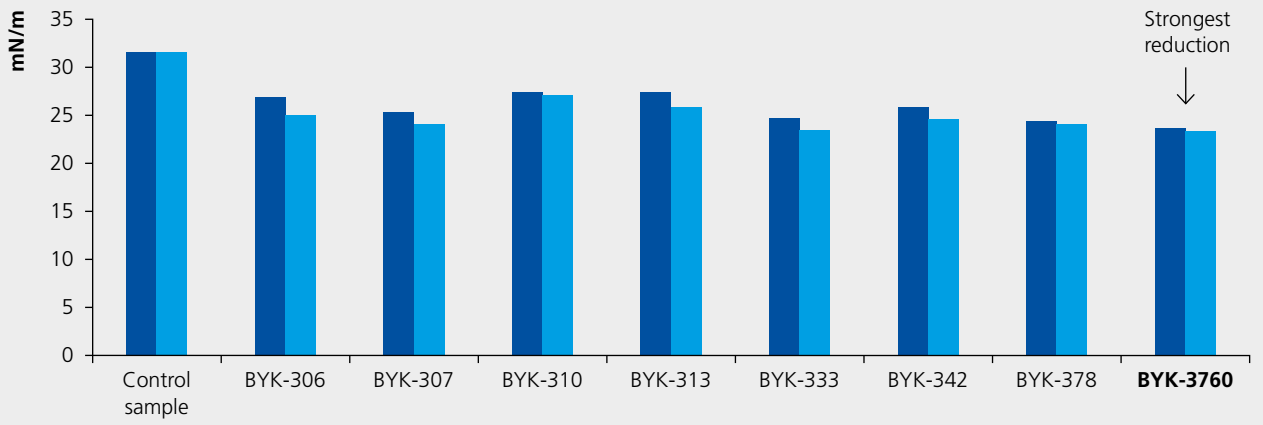
Applications

- General industrial coatings
- Wood and furniture coatings
- Can coatings
- Architectural coatings
- Protective coatings
- Printing inks

Technical Properties

- Polyether-modified polydimethylsiloxane
- Density (20°C): 1.02 g/ml
- Non-volatile matter (10 min., 150 °C): > 99 %
- Flash point: 102 °C

BYK-3760 – Extremely Strong Reduction in Surface Tension



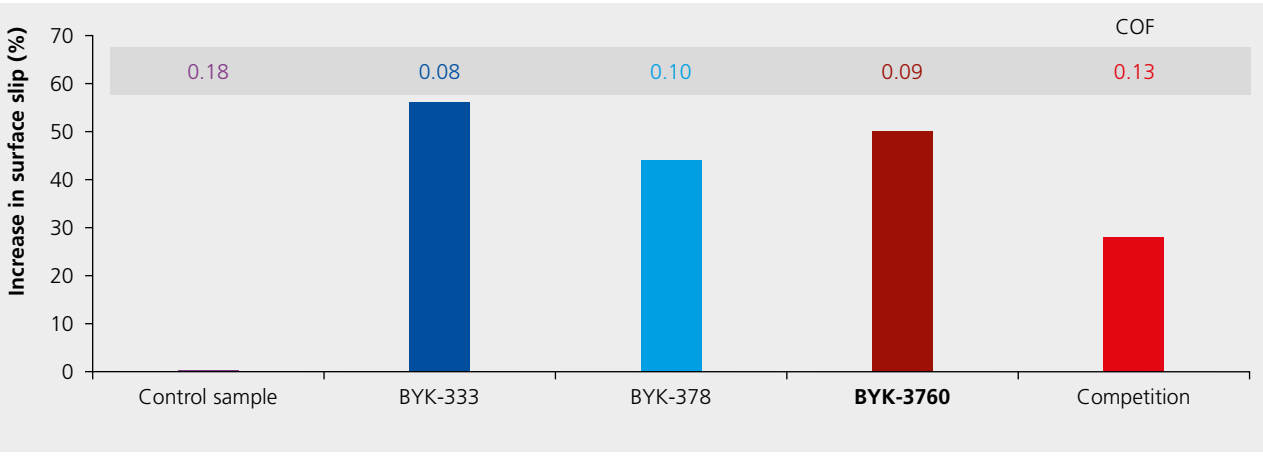
■ 0.02 % ■ 0.10 %

Dosage: Additive based on the total formulation

Test system: BPA-free, solvent-borne polyester-phenol system

Test method: Ring method to measure surface tension in a wet coating

BYK-3760 – Increase in Surface Slip in an Aqueous System



Test system: Aqueous acrylate/aliphatic polyurethane hybrid coating based on ALBERDINGK® APU 10600

Dosage: 0.1 % additive based on the total formulation

Test method: Coating applied using a doctor blade on a glass panel, wet coating thickness 100 µm; dry for 24 hours at room temperature; surface slip measured using Altek® 9505 AER and 500 g weight

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BYK Additive Guide

Available on the App Store

Google play

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