

# NANOBYK-3600

Nanoparticle dispersion (aluminum oxide) to improve the scratch resistance of aqueous, radiation curable coatings.

## Product Data

### Composition

Aluminum oxide nanoparticle dispersion

### Typical Properties

The values indicated in this data sheet describe typical properties and do not constitute specification limits.

Density (20 °C):	1.56 g/ml
Non-volatile matter (10 min., 150 °C):	55 %
Carrier:	Water
Nanoparticle content:	50 %
Particle size D50:	40 nm
Viscosity (20 °C):	25 mPa·s

### Food Contact Legal Status

For the current food contact legal status, please contact our product safety department or visit [www.byk.com](http://www.byk.com) for further information.

### Storage and Transportation

To be stored and transported between 5 °C and 40 °C. Separation or turbidity may occur during storage and transportation. Mix well before use.

### Special Note

The product must be stirred thoroughly before processing. Dried additive residues must be removed from the container since they can lead to seeding when introduced into the final product.

## Applications

### Coatings Industry

#### Special Features and Benefits

The additive improves the scratch resistance of coating surfaces and is particularly recommended for aqueous, radiation-curable parquet and furniture coatings. Even low levels of 1.0-5.0 % of the additive considerably improve the scratch resistance without having a significant impact on the optical properties such as gloss, color, transparency and other physical properties.

#### Recommended Levels

1.0-5.0 % additive (as supplied) based upon total formulation.

The above recommended levels can be used for orientation. Optimal levels are determined through a series of laboratory tests.

## Incorporation and Processing Instructions

The product reaches its full effectiveness when added at low shear forces. This ensures that even distribution in the binder system is achieved.

## Special Note

NANOBYK-3600 can be combined with silicone-containing surface additives. For radiation-curable systems we therefore recommend using NANOBYK-3600 in conjunction with, for example, BYK-UV 3500, BYK-UV 3505, BYK-UV 3510 or BYK-UV 3575. For non-radiation-curable systems we recommend NANOBYK-3600 in conjunction with, for example, BYK-307, BYK-333 or BYK-378.



Additive Guide



**BYK-Chemie GmbH**  
P.O. Box 10 02 45

46462 Wesel  
Germany  
Tel +49 281 670-0  
Fax +49 281 65735

[info@byk.com](mailto:info@byk.com)  
[www.byk.com/additives](http://www.byk.com/additives)

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