

NANOBYK-3620

VOC-free, aqueous dispersion made up of nanohybrid particles to protect glossy, aqueous, pigmented and unpigmented top-coats against scratching and abrasion.

Product Data

Composition

Surface-treated silica nanoparticle dispersion in water

VOC-free

Typical Properties

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

Viscosity (68 °F):	11 mPa·s
Density (68 °F):	9.10 lbs/US gal
Non-volatile matter (30 min., 302 °F):	31 %
Nanoparticle content:	30 %
Particle size D50:	< 100 nm

Food Contact Legal Status

For the current food contact legal status, please contact our product safety department or visit www.byk.com for further information.

Storage and Transportation

The product is sensitive to frost.

Applications

Liquid coatings

Special Features and Benefits

NANOBYK-3620 improves the abrasion and scratch resistance of aqueous, glossy coatings. This protective property comes into effect quickly after only a brief drying period. NANOBYK-3620 has no negative influences on the gloss and transparency, and is therefore particularly suitable for clear coats.

Recommended Use

Wood and furniture coatings	■
Industrial coatings	■
Architectural coatings	■

■ particularly recommended

NANOBYK-3620 is particularly recommended for physically drying pure acrylates and acrylate copolymers. 2 K polyurethane coatings can achieve an earlier final scratch resistance without influencing the pot life of the system.

Recommended Levels

The improvement of the scratch resistance of a coating can often be achieved with just 0.5 % additive (as supplied, based upon total formation). For an increased abrasion resistance, at least 1.0 % NANOBYK-3620 is recommended. The dosage levels are indicated for the purpose of orientation. Optimal dosage levels are determined through series of tests.

Incorporation and Processing Instructions

The product is easy to incorporate and should be stirred into the coating. It is preferable to add the additive after the adjustment of the pH value (> 8) of the coating, so as to avoid any intolerance which could cause turbidity.

Special Note

NANOBYK-3620 does not settle and therefore requires no stirring before use.