

NANOBYK-3840

Nanoparticle dispersion (zinc oxide) for long-term UV protection in aqueous systems.

Product Data

Composition

Zinc oxide nanoparticle dispersion

Typical Properties

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

Density (68 °F):	13.27 lbs/US gal
Non-volatile matter (10 min., 302 °F):	44 %
Carrier:	Water
Nanoparticle content:	40 %
Particle size D50:	40 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

Store and transport between 5 °C and 40 °C. Separation may occur. Stir before use.

Applications

Coatings Industry

Special Features and Benefits

The zinc oxide nanoparticles dispersed in this additive provide long-term UV protection. This improves the protection of the film and substrate without having a significant impact on optical properties such as gloss, coloring, transparency and other physical properties. Use in combination with organic radical scavengers (HALS) is recommended.

Recommended Use

The additive is particularly recommended for aqueous wood and furniture coatings and architectural coatings (wood care) for transparent systems.

Recommended Levels

2-6 % additive (as supplied) based upon solid binder.

The above recommended levels can be used for orientation. Optimal levels are determined through a series of laboratory tests. The optimal dosage level of UV absorber is dependent on the layer thickness of the coating film. Thin layers require higher dosage levels while lower dosage levels are sufficient for thick layered systems.

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

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



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