

Hydrasperse® UVP

TECHNICAL INFORMATION

Color Solutions

UV protection paste

Hydrasperse UVP is an ultrafine titanium dioxide dispersion prepared in propylene glycol/water for waterborne coatings and solventborne long oil alkyd systems. It provides excellent ultraviolet (UV) protection to waterborne coatings through strong UV-A and UV-B absorption, protecting the substrate from degradation. Its broad compatibility and excellent transparency make it a highly effective product that can be used in most coatings systems without impacting appearance.

Key benefits

- Strong UV-A and UV-B absorption for superior substrate protection
- Inorganic-based material that does not migrate; UV-absorption performance stable for the lifetime of the coating
- Broad compatibility across most coatings systems
- Excellent transparency with no effect on appearance or color
- Effective in both waterborne coatings and solventborne long oil alkyd systems
- Absorbs part of high-energy blue light up to 440 nm for enhanced durability

Applications

- Industrial coatings
- Wood coatings

Physical properties

Property	Value
Appearance	White/light brownish liquid
Pigment concentration	35%
Average particle size	100–200 nm
Specific gravity	1,250–1,300 kg/m ³
Viscosity	75–200 mPa.s
pH	6.5–7.5

Unlike common organic UV absorbers that can migrate or degrade during weathering, Hydrasperse UVP is based on an inorganic material. Once incorporated into a coating, it does not migrate – its UV-absorption performance remains stable throughout the entire lifetime of the coating.

Performance details

Incorporating Hydrasperse UVP into an organic clear coat enables strong UV absorption while remaining transparent in the visible range. It protects both the binder matrix and the underlying substrate from UV-A and UV-B radiation, while also absorbing part of the high-energy blue light up to 440 nm. This results in excellent protection and long-term durability for wooden substrates.

The UV protection paste is based on an inorganic material, which means that once it is incorporated into a coating, it does not migrate. Its UV-absorption performance therefore remains stable throughout the entire lifetime of the coating. This stands in contrast to common organic UV absorbers, which can lose effectiveness over time due to migration or degradation during weathering.

Compatibility and use

Hydrasperse UVP is suitable for use in both waterborne coatings and solventborne long oil alkyd coating systems. Its broad system compatibility means it can be readily incorporated into most standard waterborne coatings formulations. Testing under application conditions is recommended to confirm suitability for specific end uses.



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