

Tinuvin[®] 5321-DW ECO

Product description

Tinuvin 5321-DW ECO is an aqueous preparation of a blend of UV absorber and HALS for coatings, printing and packaging, adhesives and sealant applications. It is designed to meet good performance and durability requirements of exterior water-based industrial and architectural coatings.

Key benefits

- Good long-term performances combined with a higher photo-permanence than classical light stabilizer
- Fully preserves dry-film properties such as inherent color, transparency and gloss
- Does not affect other film properties such as water-sensitivity, blocking resistance, hardness and scratch resistance, does not react with acidic paint components
- Stir-in product: mixes easily in broad spectrum of water-based systems without applying high shear forces, disperses homogeneously without addition of co-solvents or any other dispersing aids
- No settling behavior upon storage
- No EUH 208 label, no CMR2 (H361f), no H317, no H400, no H410, no WGK3

Chemical nature

Dispersion of UV absorber and HALS

Properties

Physical form

Off-white dispersion

Technical data

(not supply specification)

Active content		~ 40.0 %
Solid content		~ 58.0 %
Dynamic viscosity @ 20 °C	DIN 53019	~ 50.0 mPa.s @ 100 s ⁻¹
Density @ 20 °C	DIN EN ISO 2811-1	1.04 g/cm ³
pH		6.0 – 9.5

Application

Tinuvin 5321-DW ECO is suitable in all water-based formulations whose pH is comprised between 4.5 and 12.0 (e.g., acrylics and 1K/2K PUD)

For an improved protection of light-colored woods (pine, fir, spruce...), Tinuvin 5321-DW ECO can be combined with Lignostab® 1198 or Lignostab 530

Tinuvin 5321-DW ECO being added in the topcoat, while Lignostab 1198 or 530 is added in the pretreatment

Wood stains and coatings, waxes and wood-care products

Vinyl coatings (displays, PVC liners, tarpaulins, floor tiles...)

Plastic coatings (PC, PMMA, PET, sheets, films, packaging...)

Glass coatings (architectural glazing, packaging...)

Architectural coatings (roof tiles, walls, floors...)

Overprint varnishes over metal, paper, laminates...

Water-based 1K and 2K PUR (acrylic/NCO, PES/NCO...)

Water-based acrylics, acrylic/alkyd hybrids and PUD

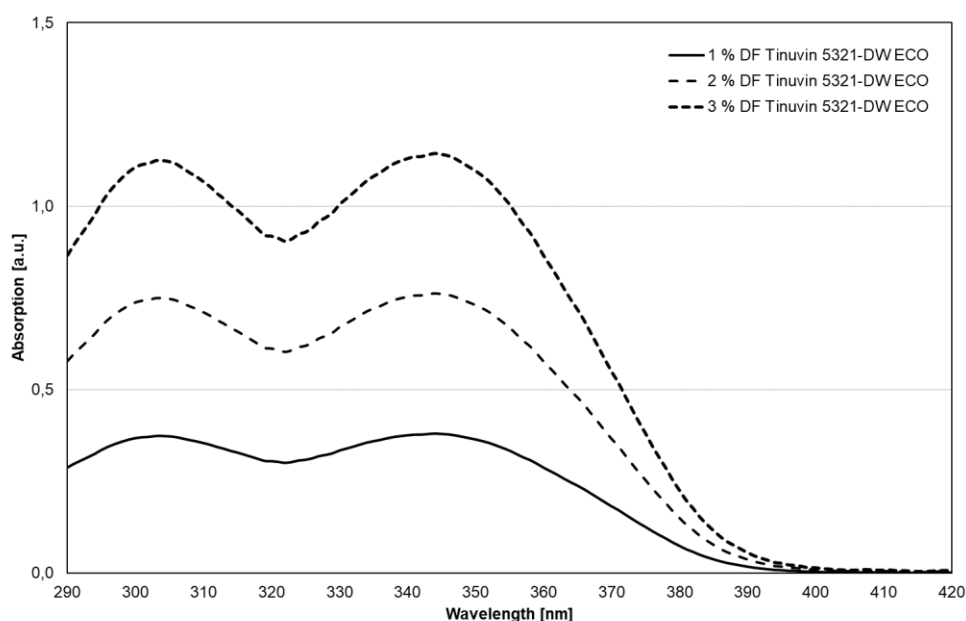
Water-based thermosetting (acrylic/melamine, PES/melamine...)

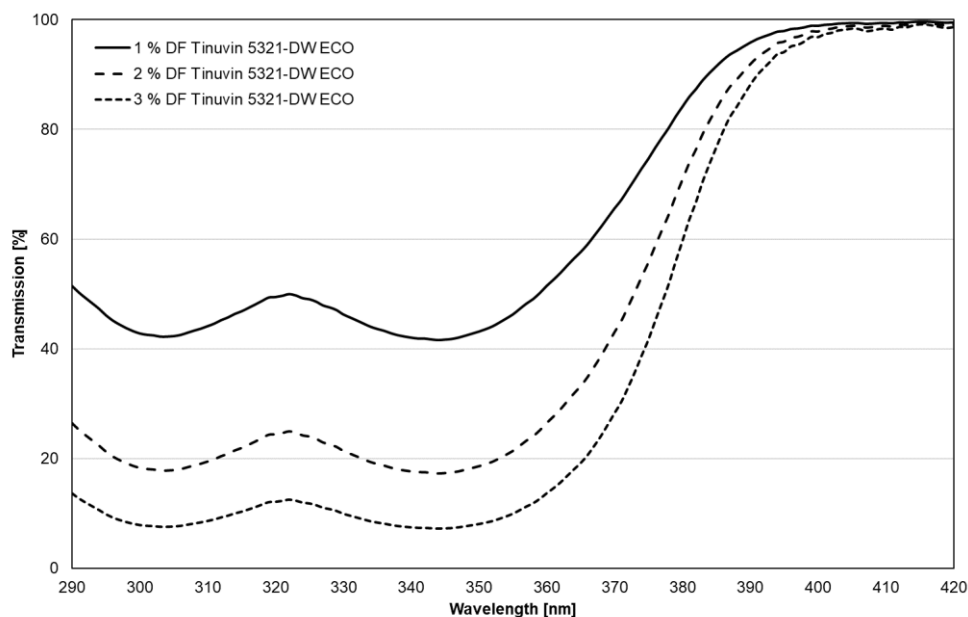
Formulation guideline

The concentration of Tinuvin 5321-DW ECO depends on the dry-film thickness and on the desired protection. The amount required for optimum performance should be determined in trials covering a concentration range

Dry-film thickness [μm]:	Addition of Tinuvin 5321-DW ECO [% active on total binder solid content]:
40	1.0 – 3.0
60	0.5 – 2.0

The theoretical concentration in an applied 40 μm clear coat was calculated as a function of the concentration in toluene/THF (20/80) with the help of the Lambert-Beer law. Spectra were recorded in toluene/THF (20/80) with a light path of 1 cm (DF = delivery form)





Storage

When kept in original un-opened containers and at a temperature between +5 °C and +35 °C, Tinuvin 5321-DW ECO can be stored up to 18 months from date of manufacture

Stir thoroughly before use

Safety

When handling this product, please comply with the advice and information given in the safety data sheet and observe protective and workplace hygiene measures adequate for handling chemicals.

Note

The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Any descriptions, drawings, photographs, data, proportions, weights, etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product. The agreed contractual quality of the product results exclusively from the statements made in the product specification. It is the responsibility of the recipient of our product to ensure that any proprietary rights and existing laws and legislation are observed.

© = Registered trademark

™ = Trademark of the BASF Group, unless otherwise noted

BASF SE
Resins & Additives (Europe)
67056 Ludwigshafen, Germany
www.basf.com/resins