Ciba Specialty Chemicals

Coating Effects Segment

**Ciba® TINUVIN® 328**
Light Stabiliser

**General**

TINUVIN 328 is a UV absorber of the hydroxyphenylbenzotriazole class designed for coatings. Because of its extended UV absorption, TINUVIN 328 provides efficient protection to coatings and light sensitive substrates.

**Chemical Composition**

![Chemical Structure](image)

2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol

Molecular weight: 351.5     CAS No. 25973-55-1

**Transmittance Spectrum**

*(in Toluene, cell thickness 1 cm)*

![Transmittance Spectrum](image)

Explanation:
- Top line: 0.001 % TINUVIN 328, corresponds to 0.25 % in a 40 µm film
- Second line: 0.002 % TINUVIN 328, corresponds to 0.5 % in a 40 µm film
- Third line: 0.004 % TINUVIN 328, corresponds to 1.0 % in a 40 µm film
- Bottom line: 0.006 % TINUVIN 328, corresponds to 1.5 % in a 40 µm film
Physical Properties

**Appearance**: slightly yellow powder

**Melting range**: 80-88°C

**Solubility at 20°C (g/100 g solution)**:
- butylcarbitol: 3.5
- butanol: 2.5
- butylacetate: 15
- ethylglycol: 4
- 1-methoxypropylacetate: 10
- methylisobutylketone: 14
- Solvesso 100 1) [25]
- Solvesso 150 1) [25]
- xylene: 34
- water: < 0.01

1) Trade Mark of Esso

Application

TINUVIN 328 is recommended for applications such as:

- automotive coatings
- industrial coatings
- trade sale paints such as wood stains or do-it-yourself paints.

TINUVIN 328 may be used in combination with a light stabilizer of the sterically hindered amine or aminoether class (HALS) such as recommended below. These combinations give coatings superior protection against gloss reduction, cracking, blistering, delamination and color change. TINUVIN 328 is only recommended for ambient and low temperature cured systems, i.e. air drying alkyd based systems.

The amount of TINUVIN 328 required for optimum performance should be determined in trials covering a concentration range.

Recommended concentrations:
(concentrations are based on weight percent binder solids)

1 - 3 % TINUVIN 328
+ 0.5 - 2 % TINUVIN 144, TINUVIN 292, or TINUVIN 123

Safety and Handling

TINUVIN 328 should be handled in accordance with good industrial practice. Detailed information is provided in the Safety Data Sheet.
Important Notice


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