

# Tinuvin<sup>®</sup> 99-2

## Product Description

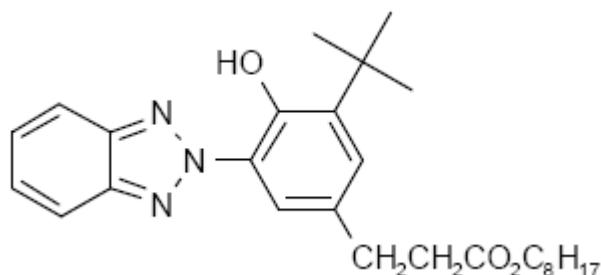
Tinuvin 99-2 is a liquid UV absorber of the hydroxyphenyl-benzotriazole class designed to fulfill the cost/performance and durability requirements of trade sales and industrial coatings. Its broad UV absorption allows efficient protection of light sensitive substrates such as wood and plastics.

## Key Features & Benefits

- Industrial grade liquid hydroxyphenyl-benzotriazole UVA
- Lower viscosity version of Tinuvin 99
- Excellent spectral coverage in the UV region
- Excellent thermal permanence

## Chemical Structure

Tinuvin 99-2 is: 95% Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-5-(1, 1-dimethylethyl)-4-hydroxy-, C7-9-branched and linear alkyl esters, 5% 1-methoxy-2-propyl acetate



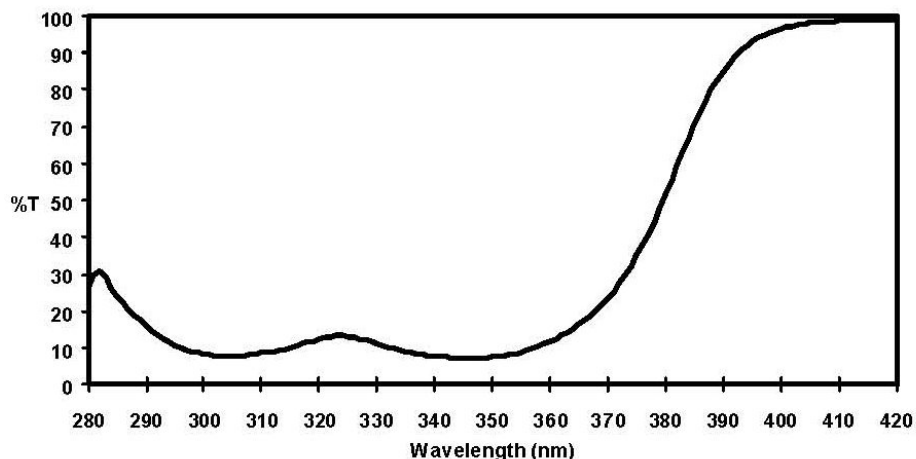
## Properties

### Typical Properties

CAS No:	127519-17-9, 108-65-6
Appearance	light brown amber liquid
Molecular weight	451.6
Dynamic Viscosity at 25°C (Brookfield, 20 rpm)	mPa s 2000
Density at 20°C	g/cm <sup>3</sup> 1.07
Miscibility at 20°C	Tinuvin 99-2 is miscible to more than 30% with most commonly used paint solvents. Water solubility is less than 0.1%

These typical values should not be interpreted as specifications.

**Transmittance Spectrum**  
(40 mg/l in toluene, cell thickness = 1 cm)



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## Applications

Tinuvin 99-2's very high thermal stability and environmental permanence makes it suitable for coatings exposed to high bake cycles and/or extreme environmental conditions.

Tinuvin 99-2 is recommended for applications such as:

- Trade sales paints, especially wood stains, and clear varnishes
- General industrial applications
- High-bake industrial systems (e.g. coil coatings)

The performance provided by Tinuvin 99-2 is enhanced when used in combination with a HALS stabilizer such as Tinuvin 292, Tinuvin 249 or Tinuvin 123. These combinations improve the durability of coatings by inhibiting or retarding the occurrence of failures such as gloss reduction, cracking, chalking, color change, blistering, and delamination.

The amount of Tinuvin 99-2 required for optimum performance should be determined in laboratory trials covering a concentration range.

### Recommend Concentrations

<b>clear coatings &amp; varnishes</b>	1.0 – 3.0 % + 0.5 – 2.0 %	Tinuvin 99-2 alone or in combination with Tinuvin 123, Tinuvin 249 or Tinuvin 292
<b>pigmented coatings</b>	1.0 – 3.0 + 0.5 – 2.0 %	Tinuvin 99-2 in combination with Tinuvin 123, Tinuvin 249 or Tinuvin 292

(concentrations are based on weight percent binder solids)

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## Safety

### General

The usual safety precautions when handling chemicals must be observed. These include the measure described in Federal, State and Local health and safety regulations, thorough ventilation of the workplace, good skin care, and wearing of protective goggles.

### Safety Data Sheet

All safety information is provided in the Safety Data Sheet for Tinuvin 99-2.

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## Storage

Please refer to the "Handling and Storage of Polymer Dispersions" brochure.

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## Important

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