

Printing & Packaging

Industrial Coatings

Technical Data Sheet

Tinuvin® 99-2

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Product Description

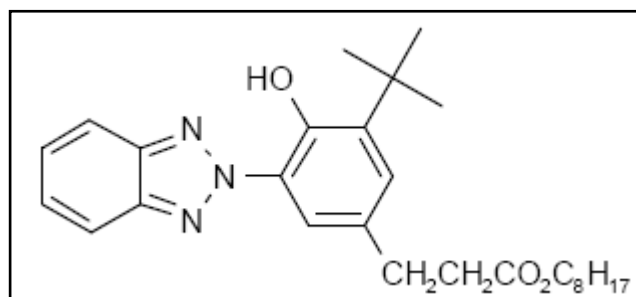
Tinuvin® 99-2 is a liquid UV absorber of the hydroxyphenyl-benzotriazole class designed to fulfill the cost/performance and durability requirements of trade sales and industrial coatings. Its broad UV absorption allows efficient protection of light sensitive substrates such as wood and plastics.

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

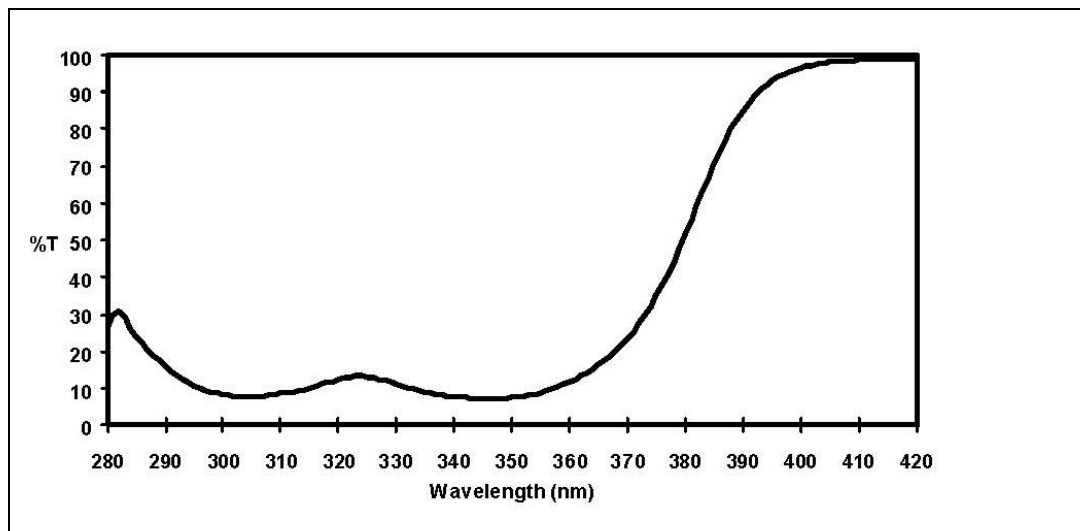
Typical Properties

CAS No:	127519-17-9, 108-65-6
Appearance	lightbrown amber liquid
Molecular weight	451.6
Dynamic Viscosity at 25°C (Brookfield, 20 rpm)	2000 mPa s
Density at 20°C	1.07 g/cm ³

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)



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 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.

Should the self color of Tinuvin® 99-2 be an issue, it is recommended to test Tinuvin® 384-2 as a potential alternative.

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

Recommend Concentrations

clear coatings & varnishes

1.0 – 3.0 %
+
0.5 – 2.0 %

Tinuvin® 99-2 alone or in combination with
Tinuvin® 123 or Tinuvin® 292

pigmented coatings

1.0 – 3.0
+
0.5 – 2.0 %

Tinuvin® 99-2 in combination with
Tinuvin® 123 or Tinuvin® 292

(concentrations are based on weight percent binder solids)

Safety

General

The usual safety precautions when handling chemicals must be observed. These include the measures 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 Tinuvin® 99-2.

Important

While the descriptions, designs, data and information contained herein are presented in good faith and believed to be accurate, they are provided for guidance only. Because many factors may affect

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