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# Tinuvin® 171

***Product Description***

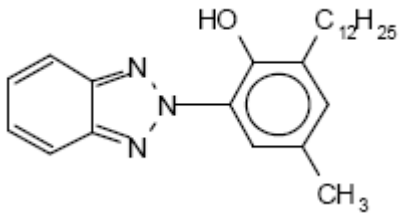
**Tinuvin 171 is a liquid UV light absorber of the hydroxyphenyl-benzotriazole class. Since its absorption spectrum does not tail significantly into the visible region, it is an ideal UV absorber for those systems where initial yellowing must be kept to a minimum.**

***Key Features & Benefits***

- ***Liquid hydroxyphenyl-benzotriazole UVA designed for use in photographic applications***
- ***Low tendency to crystallize in formulations allows higher loadings***
- ***High extinction in the UVA region***

***Chemical Structure***

**Phenol, 2-(2H-benzotriazol-2-yl)-6-dodecyl-4-methyl-, branched and linear**



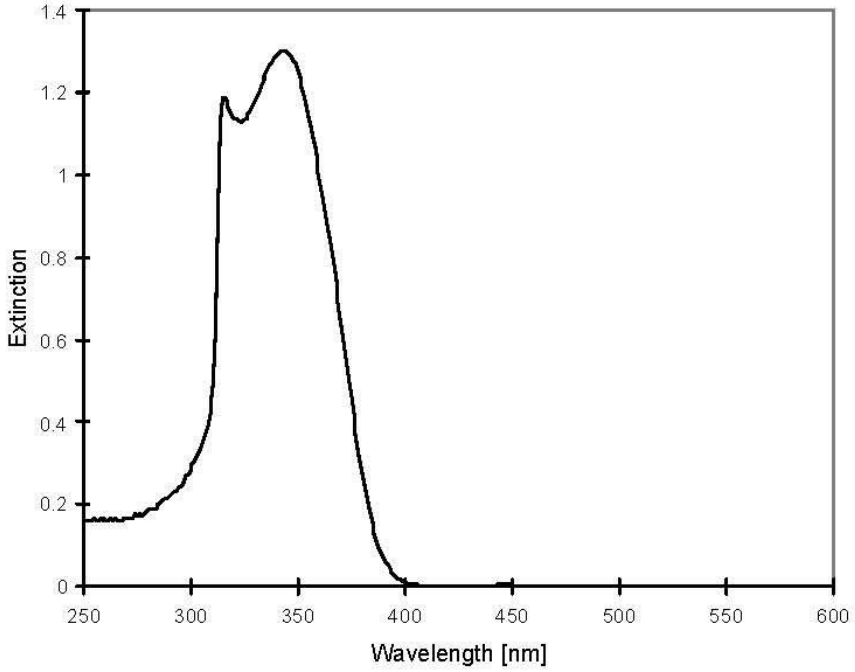

## Properties

***Typical Properties***

| | |
|---|---|
| CAS No. | 125304-04-3 |
| EC No. | 401-680-5 |
| Molecular weight | 395 |
| Appearance | slightly yellow to yellow liquid |
| Miscibility at 20°C (g/100 g solution): | Miscible to more than 50% with most commonly used solvents and tricresylphosphate. |

* These typical values should not be interpreted as specifications

**Absorption Spectrum**
(400 mg/m$^2$ UV absorber in gelatin-based emulsion layer)




## Applications

***Processing***

Tinuvin 171 is recommended for photographic applications. It is particularly suitable for chromogenic color papers to protect the dyes and couplers from harmful UV light.

One of the remarkable benefits of the liquid form of Tinuvin 171 is avoidance of crystallization of the UV absorber in the liquid photographic emulsion preparation during storage and after coating. Consequently, it allows formulation of thinner layers or layers with increased UV light protecting properties through higher load of UV absorbers.

Tinuvin 171 is also recommended for:
• Automotive coatings
• General industrial applications i.e. coil coatings, wood coatings.

The liquid form of Tinuvin 171 provides easy incorporation into solvent borne systems. The performance provided by Tinuvin 171 can be enhanced when used in combination with a HALS stabilizer such as Tinuvin 292, Tinuvin 249 or Tinuvin 123. These combinations improve the durability of clear coats by inhibiting or retarding the occurrence of failures such as gloss reduction, cracking, color change, blistering and delamination.

***Recommended Concentrations***

| | |
|---|---|
| Tinuvin 171 | 1.0 – 3.0 % |
| Tinuvin 123, Tinuvin 144 or Tinuvin 292 | 0.5 – 2.0 % |

(concentrations are based on weight percent binder solids)

The amount of Tinuvin 171 required for optimum performance should be determined in laboratory trials covering a concentration range.

## 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 171.

## Storage

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

## Important



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