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Tinuvin® 384-2

Product Description

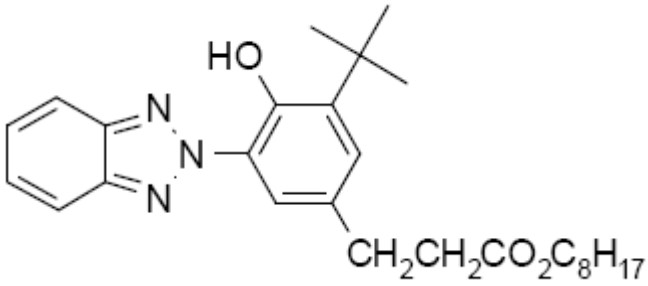
Tinuvin 384-2 is a liquid UV absorber of the hydroxyphenylbenzotriazole class developed for coatings. It's very high thermal stability and environmental permanence makes it suitable for coatings exposed to high bake cycles and/or extreme environmental conditions. It has been designed to fulfill the high performance and durability requirements of automotive and industrial high-quality finishes. Its broad UV absorption allows efficient protection of light sensitive base coats or substrates such as wood and plastics.

Key Features & Benefits

- Versatile hydroxyphenyl-benzotriazole UVA for use solvent based coatings
- Excellent spectral coverage in the UV region
- Excellent photopermanence and thermal stability

Chemical Structure

Tinuvin 384-2 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

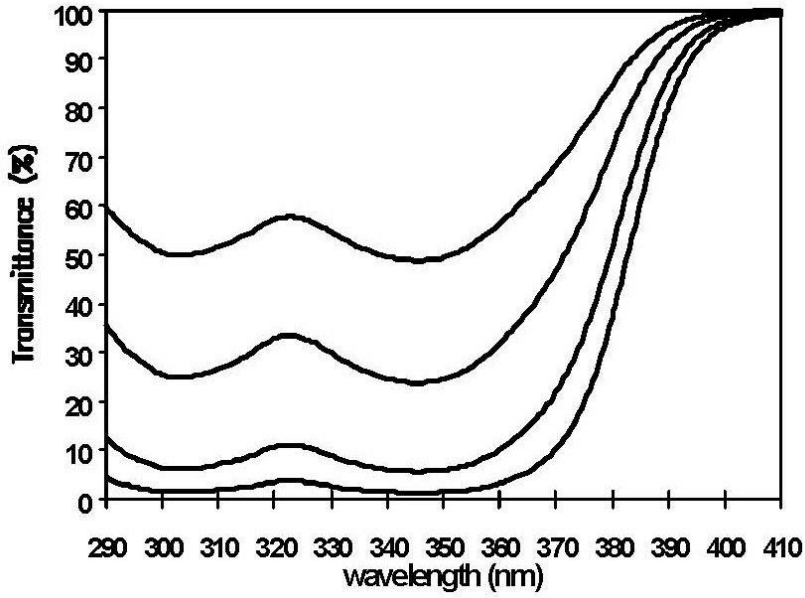
CAS No:		127519-17-9, 108-65-6
Appearance		pale yellow liquid
Molecular weight		451.6
Dynamic Viscosity at 20 °C	cps	3,200
Density at 20 °C	g/cm³	1.0718

Miscibility (g/100 g solution) at 20 °C:

butanol	> 30
butylcarbitol	> 30
ethyl glycol acetate	> 30
butyl glycol acetate	> 30
methyl ethyl ketone	> 30
1-methoxypropylacetate-2	> 30
Solvesso 100[1]	> 30
Solvesso 150[1]	> 30
n – hexane	> 30
water	< 0.01

[1] trademark of Esso
These typical values should not be interpreted as specifications.

Transmittance Spectrum
(in toluene, cell thickness 1 cm)



Top Line:	0.001% Tinuvin 384-2, corresponds to 0.25% in a 40 µ film
Second Line:	0.002% Tinuvin 384-2, corresponds to 0.50% in a 40 µ film
Third Line:	0.004% Tinuvin 384-2, corresponds to 1.0% in a 40 µ film
Bottom Line:	0.006% Tinuvin 384-2, corresponds to 1.5% in a 40 µ film

Applications

Tinuvin 384-2 is recommended for:
- Automotive coatings
- General industrial applications i.e. coil coatings, wood coatings.

The liquid form of Tinuvin 384-2 provides easy incorporation into solvent borne systems.

The performance provided by Tinuvin 384-2 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. The amount of Tinuvin 384-2 required for optimum performance should be determined in laboratory trials covering a concentration range.

Recommend Concentrations

Tinuvin 384-2	1.0 – 3.0 %
Tinuvin 123, Tinuvin 249 or Tinuvin 292	0.5 – 2.0 %

(concentrations are based on weight percent binder solids)

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 384-2.

Storage

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

Important

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