Tinuvin® 900

Product Description

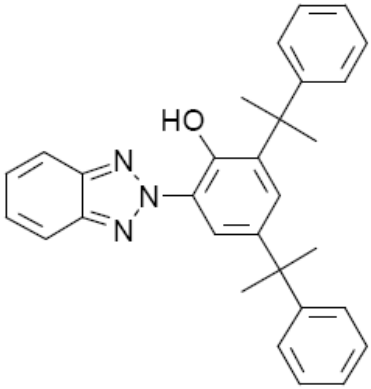
Tinuvin 900 is a UV absorber of the hydroxyphenyl-benzotriazole class developed specifically for coating systems exposed to high temperatures and/or extreme environmental stresses.

Key Features & Benefits

- Solid hydroxyphenyl-benzotriazole with excellent spectral coverage in UV region
- Excellent thermal and photo-permanence
- Excellent for improving exterior durability of powder & solvent borne coatings

Chemical Structure

Tinuvin 900 is: 2-(2H-benzotriazol-2-yl)-4, 6-*bis* (1-methyl-1-phenylethyl)phenol



Properties

Typical Properties

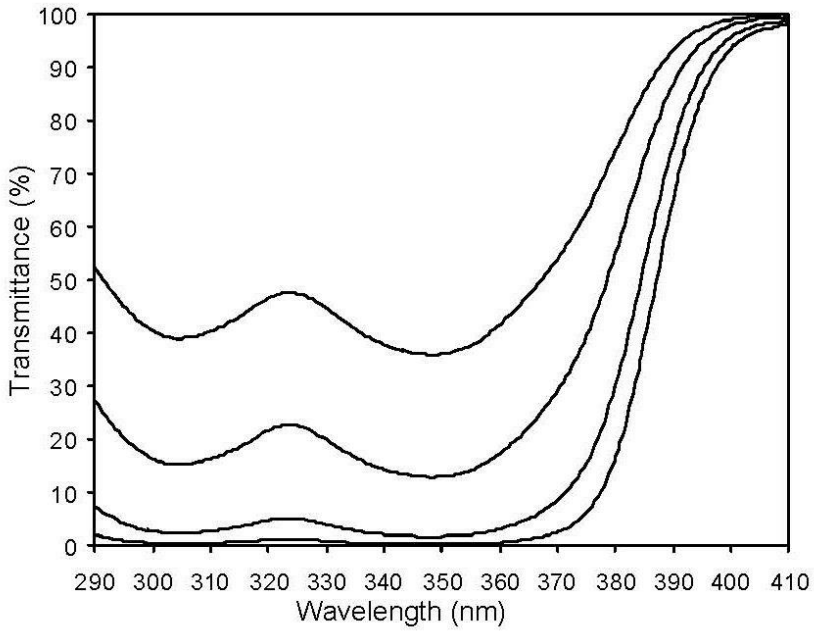
CAS No:		70321-86-7
Appearance		slightly yellow powder
Molecular weight		447.6
Melting range	°C	137 – 141

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

butylcarbitol	0.2
butanol	0.3
butyl acetate	4.5
ethyglycol	1
1-methoxypropylacetate-2	2
methylethylketone	5.5
Solvesso 100 [1]	5
Solvesso 150 [1]	5
xylene	10
water	< 0.01

[1] Registered 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 900, corresponds to 0.3% in a 40 µm film
Second Line:	0.002% Tinuvin 900, corresponds to 0.5% in a 40 µm film
Third Line:	0.004% Tinuvin 900, corresponds to 1.0% in a 40 µm film
Bottom Line:	0.006% Tinuvin 900, corresponds to 1.5% in a 40 µm film

Applications

Tinuvin 900 is recommended for applications such as:

- Solvent borne automotive coatings
- Coil coatings
- Powder coatings
- Hot melt adhesives

Tinuvin 900 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. The light stabilizers may be added in two-coat automotive finishes to the base and clear coat. However, according to our experience the optimum protection is achieved by adding the light stabilizer to the topcoat.

The amount of Tinuvin 900 required for optimum performance should be determined in laboratory trials covering a concentration range.

Recommend Concentrations

1.0 – 3.0%	Tinuvin 900
+	
0.5 – 2.0%	Tinuvin 144, Tinuvin 292, or Tinuvin 123

(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 900.

Storage

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

Important

Responsible Care®
Good Chemistry at Work

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