

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:

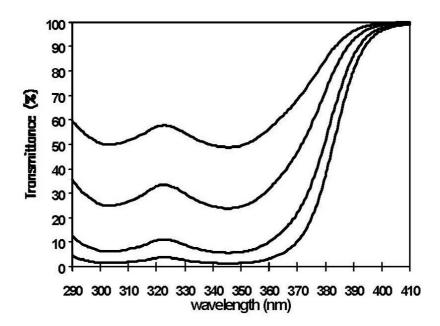
butanol > 30 butylcarbitol > 30 > 30 ethyl glycol acetate > 30 butyl glycol acetate methyl ethyl ketone > 30 > 30 1-methoxypropylacetate-2 Solvesso 1001 > 30 Solvesso 1501 > 30 > 30 n - hexane water < 0.01

These typical values should not be interpreted as specifications.

¹ trademark of Esso

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

The descriptions, designs, and data contained herein are presented for your guidance only. Because there are many factors under your control which may affect processing or application/use it is necessary for you to make appropriate tests to determine whether the product is suitable for your particular purpose prior to use. NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, OR DATA MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, DATA OR DESIGNS PROVIDED BE PRESUMED TO BE A PART OF OUR TERMS AND CONDITIONS OF SALE. Further, you expressly understand and agree that the descriptions, designs, and data furnished by BASF hereunder are given gratis and BASF assumes no obligation or liability for same or results obtained from use thereof, all such being given to you and accepted by you at your risk.

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