

Tinuvin® 384-2

UV absorber

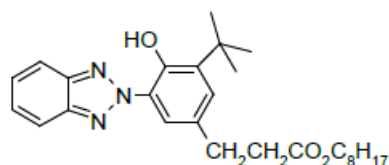
Product description

Tinuvin® 384-2 is a liquid benzotriazole-based UV absorber for coatings, adhesives and sealants. It was designed to meet high performance and durability requirements of solvent-based automotive OEM and refinish as well as industrial coatings including UV-curable systems.

Key benefits

- Broad spectral coverage
- Good long-term performance (photo permanence)
- Medium thermal stability
- Low inherent color

Chemical nature



2-(2-hydroxyphenyl)-benzotriazole, containing 5 % 1-methoxy-2-propyl acetate (CAS No. 108-65-6)

CAS number

127519-17-9

Molecular weight

451.6 g/mol

Properties

Physical form

Viscous, slightly yellow to yellow liquid

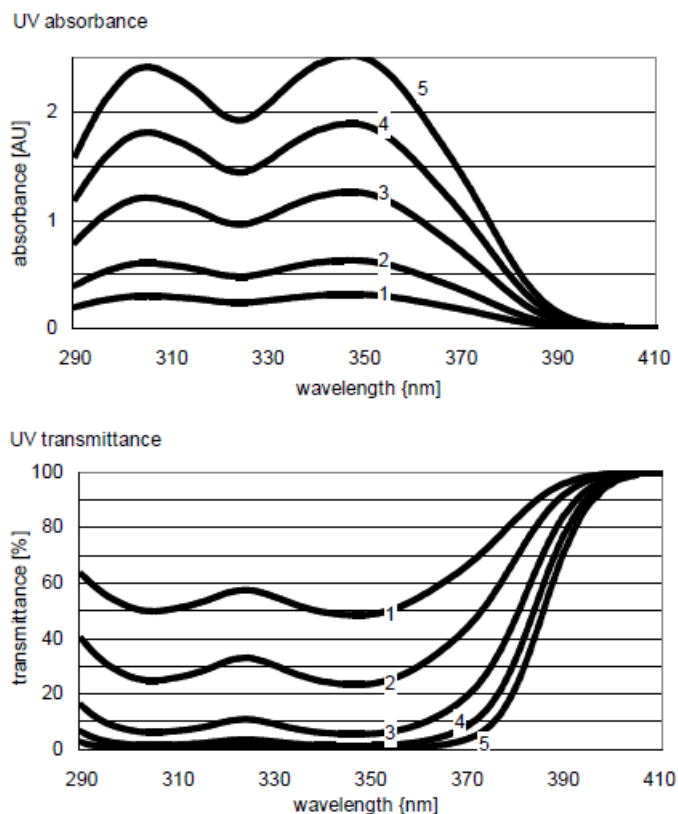
Technical data

(not supply specification)

Viscosity, dynamic	DIN 53018/53019 (20 °C)	~ 3,000 mPa.s
Density	DIN 51757 (20 °C)	1.05 – 1.09 g/cm ³
Flash point	92/69/EWG A. 9	73 – 77 °C

Miscibility

Miscible with most organic solvents, easy to incorporate into water-based systems by use of co-solvents

Spectral properties**Legend**

- | | |
|---|---|
| 1 | 10 mg/l (0.001 % $\approx$ 0.25 % active in 40 μ m) |
| 2 | 20 mg/l (0.002 % $\approx$ 0.50 % active in 40 μ m) |
| 3 | 40 mg/l (0.004 % $\approx$ 1.00 % active in 40 μ m) |
| 4 | 60 mg/l (0.006 % $\approx$ 1.50 % active in 40 μ m) |
| 5 | 80 mg/l (0.008 % $\approx$ 2.00 % active in 40 μ m) |

The theoretical concentration in an applied 40- μ m clear coat was calculated as a function of the concentration in toluene with the help of the Lambert-Beer law. Spectra were recorded in toluene, light path length = 1 cm.

Application

Fields of application	■ Automotive OEM and refinish coatings
	■ Color-sensitive industrial coatings
	■ Glass and ceramic coatings (architectural glazing, ...)
	■ Overprint varnishes over metal, board, paper, laminates, ...
	■ Adhesives and sealants

For outdoor applications, Tinuvin® 384-2 needs to be combined with a hindered amine light stabilizer (HALS) such as Tinuvin® 123 (for acid-catalyzed systems) or Tinuvin® 292 (for 2K PUR).

Binder systems	■ 1K and 2K PUR (acrylic/NCO, PES/NCO, ...)
	■ Thermosetting (acrylic/melamine, PES/melamine, ...)
	■ Thermoplastic (acrylic, vinylic, ...)
	■ UV-curable systems (acrylic, PES, ...)

Recommended concentrations

The concentration of Tinuvin® 384-2 depends on dry-film thickness and desired degree of protection. The amount required for optimum performance should be determined in trials covering a concentration range.

Dry-film thickness	By weight on binder solids
10 – 20 µm	10.0 – 5.0 %
20 – 40 µm	5.0 – 2.5 %
40 – 60 µm	2.5 – 1.5 %

Storage

When kept in original unopened containers and at temperatures of 5.0 – 35.0 °C.
Tinuvin® 384-2 can be stored for up to 3 years from the date of manufacture.

Safety
When handling this product, please comply with the advice and information given in the safety data sheet and observe protective and workplace hygiene measures adequate for handling chemicals.

Note
The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Any descriptions, drawings, photographs, data, proportions, weights, etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product. The agreed contractual quality of the product results exclusively from the statements made in the product specification. It is the responsibility of the recipient of our product to ensure that any proprietary rights and existing laws and legislation are observed.