

Tinuvin[®] 292

Hindered amine light stabilizer (HALS)

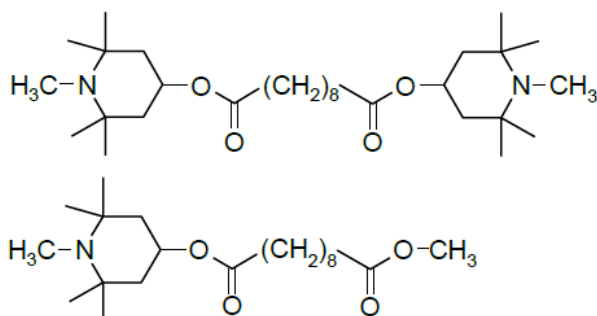
Product description

Tinuvin[®] 292 is a multi-purpose liquid basic HALS for coatings, printing and packaging, adhesives and sealants. It is designed to meet high performance and durability requirements of solvent- and water-based exterior coatings applications including radiation-curable systems (UV, electron beam). It protects coatings from surface defects such as gloss reduction, cracking, and chalking. It improves retention of mechanical properties.

Key benefits

- multi-purpose HALS
- good long-term performance
- high thermal stability

Chemical nature



basic pentamethylpiperidine derivative

CAS-number

41556-26-7, 82919-37-7

Molecular weight

509 g/mol, 370 g/mol

Properties

Physical form slightly yellow liquid

Technical data

(not supply specification)

Viscosity at 20 °C	DIN 53018/53019	~ 450 mPa.s
Density at 20 °C	DIN 51757	0.97 – 1.01 g/cm ³
Flash point	DIN EN ISO 2719	202 °C – 206 °C

Miscibility

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

Application

Field of application

Tinuvin® 292 is a multi-purpose HALS used in all industry segments:

- automotive OEM and industrial coatings
- architectural coatings
- exterior joinery coatings, wood stains and varnishes
- heavy-duty maintenance and marine coatings
- adhesives and sealants

For clear-coat applications, Tinuvin® 292 needs to be combined with a UV absorber (UVA) such as Tinuvin® 400 (for automotive OEM finishes) or Tinuvin® 1130 (for industrial coatings).

Binder systems

- 1K and 2K PUR (acrylic/NCO, PES/NCO, ...)
- water-based systems (acrylic, PUD, 2K PUR, ...)
- non-acid-catalyzed thermosetting (acrylic, PES/melamine, ...)
- thermoplastic (acrylic, vinylic, ...)
- UV-curable systems (acrylic, PES, ...)

Caution: Tinuvin® 292 can undergo acid/base interactions with paint components such as biocides, surfactants and pigments. It can also interfere with acid-catalyzed crosslinking reactions or retard the curing of some air-drying systems (e.g., alkyds or oil-based paints).

Recommended concentrations

The concentration of Tinuvin® 292 depends on the pigmentation of the coating. The amount required for optimum performance should be determined in trials covering a concentration range.

Coating type	By weight of total formulation
Clear coats	0.5 %
Semi-transparent	0.5 – 1.0 %
Opaque/solid-shade	1.0 – 2.0 %

Storage

When kept in original unopened containers and at temperatures of 5 °C – 35 °C, Tinuvin® 292 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.