

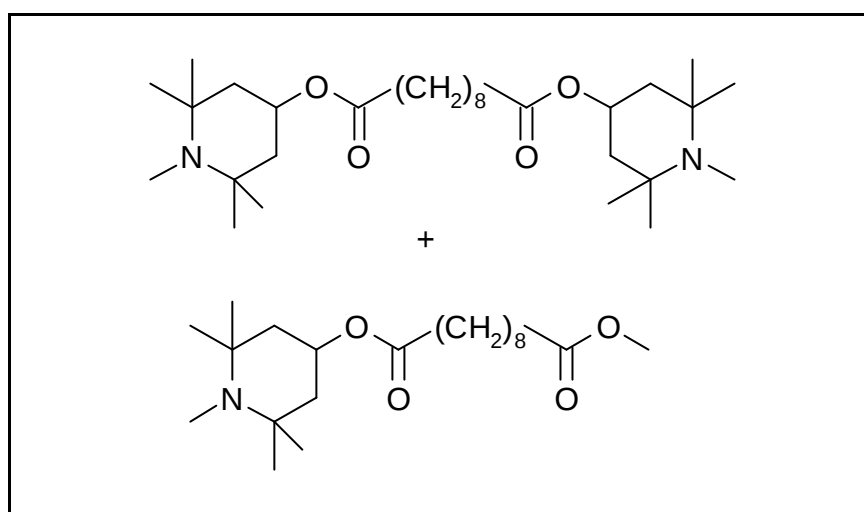


## Ciba® TINUVIN® 292

### General

TINUVIN 292 is a liquid hindered amine light stabilizer especially developed for coatings. It is an almost pure mixture of the two active ingredients below. It is this combination that keeps the product liquid, unlike the pure diester which tends to solidify, even at room temperature. The efficiency of TINUVIN 292 provides significantly extended life time to coatings by minimizing paint defects such as cracking and loss of gloss.

### Chemical Composition



*Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate*

Molecular weight: 509

CAS No. 41556-26-7

and

*Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate*

Molecular weight: 370

CAS No. 82919-37-7

### Physical Properties

Appearance: slightly yellow liquid

Dynamic Viscosity at 20°C: 400 mPa·s

Miscibility at 20°C:

TINUVIN 292 is miscible to more than 50 % with most commonly used paint solvents. Water solubility is less than 0.01 %.

### Application

TINUVIN 292 is recommended for applications such as:

- automotive coatings (non acid catalyzed)
- industrial coatings
- wood stains or do-it-yourself paints
- radiation curable coatings (with no loss of cure speed)



## Ciba® TINUVIN® 292

Its high efficiency has been demonstrated in coatings based on a variety of binders such as

- one- and two-component polyurethanes (water and solvent)
- thermoplastic acrylics (physical drying)
- thermosetting acrylics, alkyds and polyesters
- alkyds (air drying)
- water borne acrylics
- phenolics, vinylics
- radiation curable acrylics

The dispersion of TINUVIN 292 in water borne coatings may be facilitated by dilution with a water miscible solvent such as butylcarbitol.

The performance of TINUVIN 292 can be significantly improved when used in combination with a UV absorber such as recommended below. These synergistic combinations give coatings superior protection against gloss reduction, cracking, blistering, delamination and colour 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 usually achieved by adding the light stabilizers to the topcoat.

Possible interactions of TINUVIN 292 with paint ingredients such as acid catalysts should be carefully evaluated.

The amount of TINUVIN 292 required for optimum performance should be determined in trials covering a concentration range.

### Recommended concentration:

(concentrations are based on weight percent binder solids)

|                                                      |                                     |                                                                   |
|------------------------------------------------------|-------------------------------------|-------------------------------------------------------------------|
| <b>Clear coats and<br/>One coat metallic shades:</b> | <b>0.5 – 2 %</b>                    | <b>TINUVIN 292</b>                                                |
|                                                      | <b>+</b>                            |                                                                   |
|                                                      | <b>1 – 3 %</b>                      | <b>TINUVIN 1130, TINUVIN 384,<br/>TINUVIN 928, or TINUVIN 400</b> |
| <b>One coat solid shades:</b>                        | <b>0.5 – 2 %</b>                    | <b>TINUVIN 292</b>                                                |
|                                                      | <b>alone or in combination with</b> |                                                                   |
|                                                      | <b>1 – 3 %</b>                      | <b>TINUVIN 1130, TINUVIN 384,<br/>TINUVIN 928, or TINUVIN 400</b> |

### Safety and Handling

TINUVIN 292 should be handled in accordance with good industrial practice. Detailed information is provided in the Safety Data Sheet.



## Ciba<sup>®</sup> TINUVIN<sup>®</sup> 292

### Trademark

TINUVIN is a registered trademark.

### Important Notice

Purchase of TINUVIN 298 alone does not permit its use in combination with UV absorbers in stoving lacquers covered by US Patent Nos. 4314933, 4426471 and EP patent No. 52073 and corresponding patents and patent applications in other countries.

Moreover, purchase of TINUVIN 292 alone does not permit its use in combination with 2-hydroxy-phenyltriazine and benzotriazole UV absorbers in coatings as covered by US patent No. 5106891 and corresponding patents and patent applications in other countries.

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