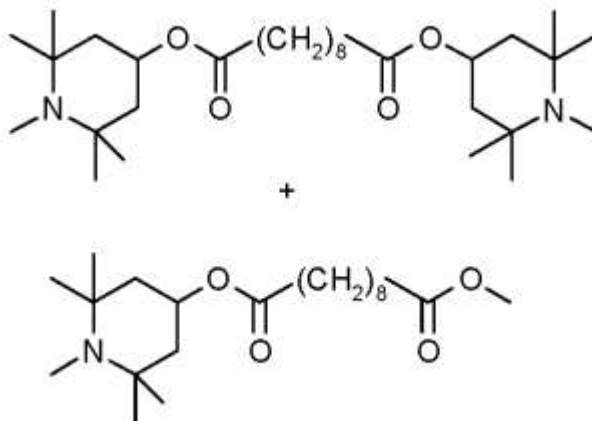


Technical Data Sheet

Product name:	UV-292
Product Form:	Slight yellow liquid
Chemical name:	<i>Bis</i> (1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate
Synonym:	Tinuvin 292 or Cyasorb UV-3765
CAS No:	41556-26-7 and 82919-37-7
EINECS No:	255-437-1 and 280-060-4
Molecular weight:	509 and 370
Molecular formula:	C ₃₀ H ₅₆ N ₂ O ₄ and C ₂₁ H ₃₉ NO ₄
Chemical Structure:	



General:

UV-292 is a liquid **Hindered Amine Light Stabilizer (HALS)** especially developed for color sensitive coatings applications. It is a very 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 UV-292 provides significantly extended life time to coatings by minimizing paint defects such as cracking and loss of gloss without adding additional color to the formulation.

Physical Properties:

Appearance:	colorless to slightly yellow liquid
Dynamic Viscosity at 20°C:	400 mPa s-1
Miscibility (g/100 g solution) at 20°C:	UV-292 is miscible to more than 50% with most commonly used paint solvents. Water solubility is less than 0.01%.

Application:

UV-292 is recommended for applications such as:

- automotive coatings (non acid catalyzed), especially refinish Coatings
- radiation curable coatings (with no loss of cure speed)
- color sensitive durable industrial coatings

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 UV-292 in water borne coatings may be facilitated by dilution with a water miscible solvent such as butylcarbitol.

The performance of UV-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 color change.

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 UV-292 with paint ingredients such as acid catalysts should be carefully evaluated.

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

Guide use:

Coating:	0.5-2.0%
Polyolefine:	0.3-0.5%
Sealant and adhesive:	0.5-1.0%
Rubber:	0.5-1.0%

Solubility (20°C, % m/m):

acetone	> 50
chloroform	> 50
cyclohexane	> 50
ethanol	> 50
ethyl acetate	> 50
n-hexane	> 50
methanol	> 50
methylene chloride	> 50
toluene	> 50
water	<0.01

Chemical Specification

Appearance:	Light yellow liquid
Ash:	0.05% max.
Assay (GC):	96.5% min.
Loss on drying:	0.5% max.

Alpha color:	50 Hazen max.
Transmittance:	
425 nm:	98% min.
500 nm:	99% min.

Safety and Handling:

UV-292 should be handled in accordance with good industrial practice. Detailed information is provided in the MSDS.

Storage:

Store in a closed system and be kept in a dry and dark place without any light exposure.

Packing:

In 25/20 or 200kg net plastic drum or 1000kg net IBC