

Ultraviolet light stabilizer for coatings

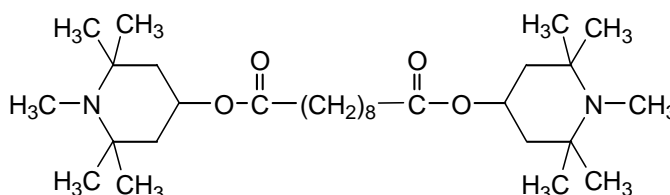
LIGHT STABILIZER

1. General

Chiguard® 353 is the first commercially available liquid light stabilizer belonging to the class of hindered amine light stabilizers. It provides outstanding light stability to various coating applications and, in addition, gives long-term heat stability to coatings by radical trapping mechanism similar to that of hinder phenol. Its effectiveness can be greatly enhanced by co-addition of UV absorbers or nickel-containing stabilizers.

2. Properties

Structure :



Chemical name : Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate,

CAS No. : 41556-26-7 & 82919-37-7

Molecular formula : C₃₀H₅₆N₂O₄

Molecular weight : 508.78

3. Physical Data

Appearance : Light yellow liquid
Specific gravity : 0.99 g/cm³ @20 °C
Boiling point : 350 °C
Vapor pressure : < 0.01 Pa @20 °C

4. Solubility

(g in 100 ml solvent, at 20 °C)

Butanol : > 50
Butyl acetate : > 50
Ethyl glycol : > 50
MEK : > 50
Styrene : > 50
TMPTA : > 50
Water : Nil

5. Specification

Appearance	:	Light yellow liquid
Assay	:	96% min.
Bis (1,2,2,6,6-pentamethyl-4-piperidyl)sebacate	:	75% - 85%
Methyl (1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	:	15% - 25%
Volatiles	:	0.5% max.
Ash	:	0.1% max.
Clarity of solution	:	Clear
Color (Harzen/APHA)	:	70 max.
Transmittance		
@425 nm	:	95% min.
@450 nm	:	97% min.
@500 nm	:	98% min.