

PRODUCT DATA SHEET
CHIGUARD® 234

WWW.CHITEC.COM

Ultraviolet light absorber for plastics, coatings and adhesives

UV ABSORBER

1. General

Chiguard[®] 234 belongs to the family of substituted benzotriazoles which protect against ultraviolet radiation. Compared to other Chitec's UV absorbers, Chiguard[®] 234 has lowest volatility which makes it especially useful for those applications involving high temperature processing.

2. Properties

Structure

CAS Name : 2-(2H-benzotriazol-2-yl)-4,6-bis(1-methyl-1-phenylethyl)phenol

CAS No. : 70321-86-7 Molecular Formula : $C_{30}H_{29}N_3O$ Molecular Weight : 447.6

3. Physical Data

Appearance : Slightly yellowish crystalline powder

 Odor
 :
 Faint

 Boiling Point
 :
 > 300 °C

 Melting point
 :
 137 - 141 °C

 Bulk density
 :
 0.67 @20 °C

4. Solubility

(g in 100 ml solvent)

 Ethyl acetate
 :
 7

 Toluene
 :
 25

 Acetone
 :
 2

 Hexane
 :
 1

 Water
 :
 Nil



WWW.CHITEC.COM

Ultraviolet light absorber for plastics, coatings and adhesives

UV ABSORBER

5. Specification

Appearance : Slightly yellowish crystalline powder

Assay : 99% min.

Melting point : 137 °C min.

Volatiles : 0.5% max.

Clarity in toluene : Clear solution (5g/100ml)
Transmittance : 95% min. @460 nm
97% min. @500 nm

6. Application

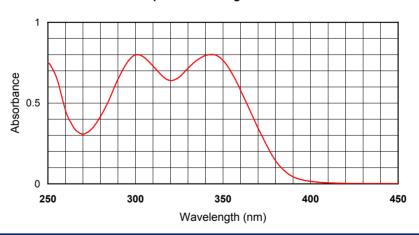
Chiguard[®] 234 is most suitable for polymer production where additive losses may occur during high temperature processing. Therefore, Chiguard[®] 234 has been widely used in the following area:

- 1. PET fiber and film
- 2. PC
- 3. POM
- 4. Nylon
- 5. TPE compounding

A percentage of 0.1% - 0.5% of Chiguard[®] 234 is recommended for protection. Light stability of polymer can be further enhanced by use of a phenolic antioxidant (e.g. DEOX 10 and 76) and a hindered amine light stabilizer (e.g. Chiguard[®] 770 and 944) in the combination with Chiguard[®] 234.

7. UV Spectrum

UV Spectrum of Chiguard 234



8. Storage

Must be stored in closed containers in dark dry conditions.

9. Packaging

25 kg net/fiber drum

10. HS Code

2933 6900