

**Ultraviolet light absorber for plastics, coatings and adhesives**

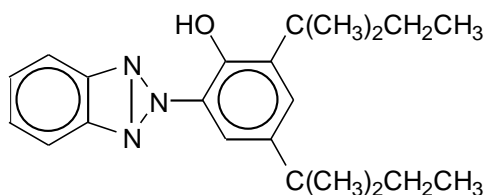
**UV ABSORBER**

**1. General**

Chiguard® 328 belongs to the family of substituted benzotriazoles, which protect against ultraviolet radiation. Chiguard® 328 has high solubility that makes it particularly useful for stabilizing coatings, polyolefins, styrenics and urethanes. Compared to other Chitec's UV absorbers, Chiguard® 328 is more solvent soluble, has better resin compatibility and washfastness, is less volatile, and provides a degree of stabilization that is generally equal to or better than other members of the family.

**2. Properties**

Structure :



Chemical name : 2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol  
 CAS No. : 25973-55-1  
 Molecular formula : C<sub>22</sub>H<sub>29</sub>N<sub>3</sub>O  
 Molecular weight : 351.5

**3. Physical Data**

Appearance : Off-white crystalline powder  
 Odor : Faint  
 Boiling point : > 300 °C  
 Melting point : 80 °C  
 Specific gravity : 1.17 @20 °C

**4. Solubility**

(g in 100 ml solvent)

Ethyl acetate : 20  
 Ethanol : 0.6  
 Methyl ethyl ketone : 24  
 Mineral spirits : 14  
 Styrene : 34  
 Water : Nil

**5. Specification**

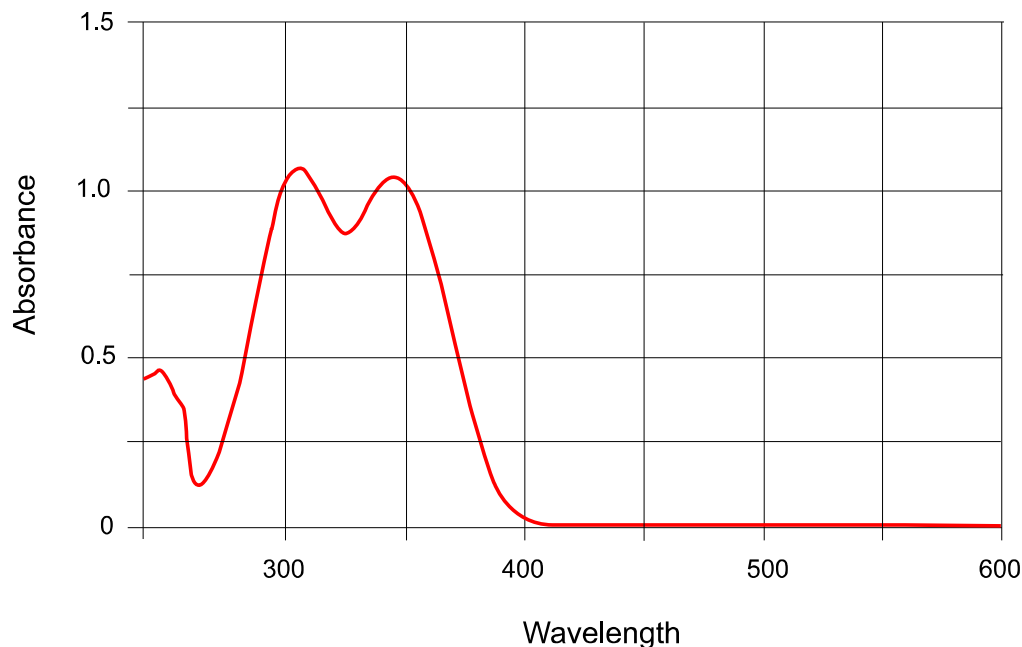
Appearance : Pale yellow crystalline powder  
 Assay : 99% min.  
 Melting point : 79 - 84 °C  
 Volatiles : 0.5% max.  
 Transmittance : 97% min. @460 nm  
                   : 98% min. @500 nm

**6. Application**

Chiguard® 328 is most suitable for protective coatings due to its non-yellowing property during baking stage. Therefore, Chiguard® 328 has been widely used in the following area:

1. Thermoplastic urethane and related polyurethane.
2. Two-component epoxy.
3. Thermosetting acrylic enamel.
4. Photographic coating.

A percentage of 0.1% - 0.5% of Chiguard® 328 is recommended for protection. Light stability of polymer can be further enhanced by use of a phenolic antioxidant (e.g. DEOX10 and 76) and a hindered amine light stabilizer (e.g. Chiguard® 770 and 944) in the combination with Chiguard® 328.

**7. UV Spectrum****8. Packaging**

20 kg net/Carton box